

Access DB# 195692

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: GREG DELCOTTO Examiner #: 72268 Date: 7/15/06
Art Unit: 1751 Phone Number 30 272-1312 Serial Number: 10/500469
Mail Box and Bldg/Room Location: REM 9A 39 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: ANTIFOULING DETERGENT FOR HARD SURFACES
Inventors (please provide full names): SEE BIB SNRAT

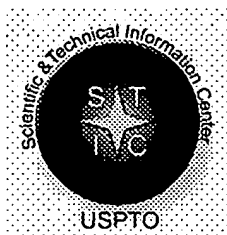
Earliest Priority Filing Date: 2/22/02

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

PLEASE SEARCH ATTACHED CLAIMS

THANK YOU !!!

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher: <u>MGH</u>	NA Sequence (#) _____	STN <input checked="" type="checkbox"/>	_____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____	_____
Searcher Location: _____	Structure (#) <u>1</u>	Questel/Orbit _____	_____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____	_____
Date Completed: <u>7/17/06</u>	Litigation _____	Lexis/Nexis _____	_____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____	_____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____	_____
Online Time: _____	Other _____	Other (specify) _____	_____



STIC Search Report

EIC 1700

STIC Database Tracking Number: 195692

TO: Greg Delcotto
Location: *Room 9A39*
Art Unit : 1751
July 17, 2006

Case Serial Number: 10500469

From: Mei Huang
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-3952
Mei.huang@uspto.gov

Search Notes

Examiner Delcotto,

Please feel free to contact me if you have any questions or if you would like to refine the search query,

Thank you for using STIC services!

Mei Huang



=> fil reg

FILE 'REGISTRY' ENTERED AT 16:29:54 ON 17 JUL 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d his ful

(FILE 'HOME' ENTERED AT 13:54:54 ON 17 JUL 2006)

FILE 'HCAPLUS' ENTERED AT 13:55:14 ON 17 JUL 2006

E US20050070456/PN
L1 1 SEA US20050070456/PN
D SCA
D IALL
SEL RN

FILE 'REGISTRY' ENTERED AT 13:57:22 ON 17 JUL 2006

L2 2 SEA (126842-83-9/BI OR 64598-61-4/BI)
D SCA
L3 STR
L4 SCR 2043
L5 STR L3
L6 STR L5
L7 STR L6
L8 STR L7
L9 48 SEA SSS SAM L8 AND L4
L10 1389 SEA SSS FUL L8 AND L4
SAV L10 DEL469/A

FILE 'HCAPLUS' ENTERED AT 15:20:35 ON 17 JUL 2006

L11 7155 SEA L10
L12 110697 SEA DETERG?
L13 12238 SEA ANTISOIL? OR ANTIFOUL? OR ANTI(W) (SOIL? OR FOUL?)
L14 61 SEA L13(3A)L12
L15 7 SEA L11 AND L14
L16 277 SEA L11 AND L12
L17 10 SEA L16 AND L13
L18 10 SEA L15 OR L17
L19 19554 SEA MOLECULAR? (2A) (WEIGHT(W) AVERAGE) OR (WT#(W) (AVG# OR
AV#)) (2A) MOL#
L20 8 SEA L16 AND L19
L21 17 SEA L18 OR L20
L22 437531 SEA SOIL? OR FOUL?
L23 29 SEA L16 AND L22
L24 1512 SEA L22(3A)L12
L25 10 SEA L16 AND L24
L26 98529 SEA 46/SC,SX
L27 403 SEA L11 AND L26
L28 10 SEA L27 AND L13
L29 32 SEA L27 AND L22
L30 1 SEA L18 AND L19
L31 1 SEA L18 AND L19
L32 1 SEA L23 AND L19
L33 35 SEA L28 OR L29
L34 2 SEA L33 AND L19
L35 42 SEA L15 OR L17 OR L20 OR L23 OR L25 OR L28 OR L29 OR L30
OR L34

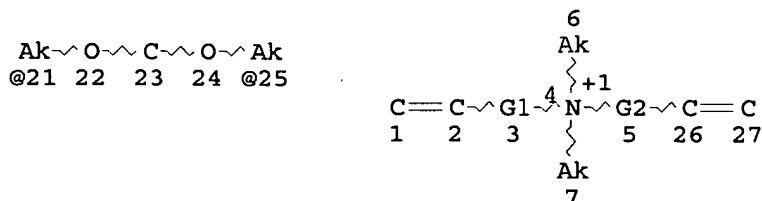
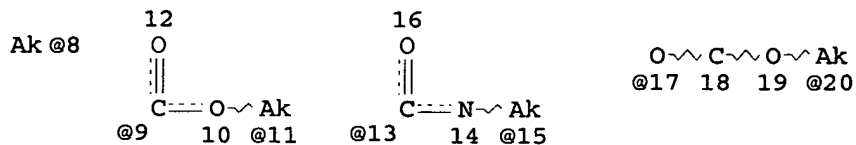
molecular
Note: further limitation w/ Yav-wt only hit
two answers w/ one of two being the author
See p78 for the other one

FILE 'REGISTRY' ENTERED AT 16:29:54 ON 17 JUL 2006

=> d l10 que stat

L4 SCR 2043

L8 STR



VAR G1=8/9-2 11-4/13-2 15-4/17-2 20-4/21-2 25-4

VAR G2=8/9-4 11-26/13-4 15-26/17-4 20-26/21-4 25-26

NODE ATTRIBUTES:

CHARGE IS E+1 AT 4

DEFAULT MLEVEL IS ATOM

GGCAT IS SAT AT 6

GGCAT IS SAT AT 7

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS UNLIMITED AT 1 2 4 9 10 12 13 14 16 17 18 19 22 23 24 26 27

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

L10 1389 SEA FILE=REGISTRY SSS FUL L8 AND L4

100.0% PROCESSED 61483 ITERATIONS

1389 ANSWERS

SEARCH TIME: 00.00.01

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 16:30:10 ON 17 JUL 2006

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=> sel l35 hit rn

E3 THROUGH E27 ASSIGNED

=> d l35 ibib abs hitstr hitind 1-42

L35 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:578163 HCAPLUS

DOCUMENT NUMBER: 145:64924
 TITLE: Hydrophobically modified cationic polymers and their use as cleaning aids
 INVENTOR(S): Song, Zhiqiang; Jaynes, Bingham Scott; Mao, Jianwen; Preuss, Andrea
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006061334	A1	20060615	WO 2005-EP56256	20051128

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-635195P P 20041207

US 2005-685235P P 20050526

AB A cleaning compn. for hard surfaces contains a polymeric compd. comprising a main backbone derived from (a) at least a quaternary ammonium salt compds. bearing 2 (optionally C1-4 alkyl-substituted) allyl groups, 20-99.9, (b) a hydrophobic unsatd. nonionic monomer that polymerizes in the presence of an initiator, 0.1-80, (c) optionally a water-sol. monomer which is different from previous monomers, <60, and (d) optionally a crosslinking agent 0-10%. The cleaning compn. gives improved soil removal properties, antimicrobial and biofilm suppression properties as well as resistance to resoiling and staining. Thus, a cationic copolymer was prepd. from diallyldimethylammonium chloride and Me methacrylate.

IT 177219-74-8P, Diallyldimethylammonium chloride;methyl methacrylate copolymer 717888-49-8P, Diallyldimethylammonium chloride;ethoxylated nonylphenol acrylate graft copolymer

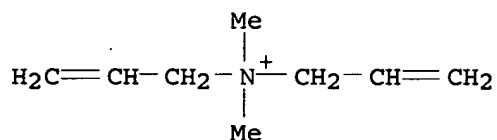
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(soil release improver; manuf. of hydrophobically modified cationic polymers for use as cleaning aids)

, RN 177219-74-8 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

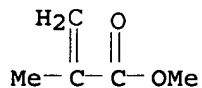
CRN 7398-69-8
 CMF C8 H16 N . Cl



● Cl⁻

CM 2

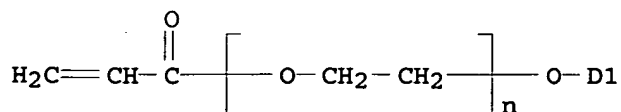
CRN 80-62-6
 CMF C5 H8 O2



RN 717888-49-8 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with α-(1-oxo-2-propenyl)-ω-(nonylphenoxy)poly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 50974-47-5
 CMF (C2 H4 O)_n C18 H26 O2
 CCI IDS, PMS

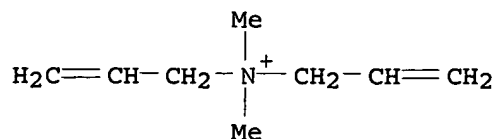


D1- (CH₂)₈-Me

CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IT 27015-40-3, Diallyldimethylammonium chloride;styrene copolymer 717888-50-1, Benzyl methacrylate; diallyldimethylammonium chloride copolymer 890126-29-1, Acrylic acid-diallyldimethylammonium chloride-methyl methacrylate copolymer

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(soil release improver; manuf. of hydrophobically modified cationic polymers for use as cleaning aids)

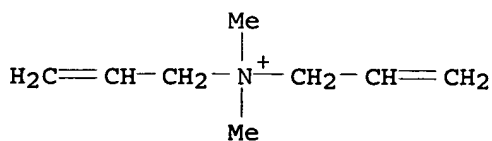
RN 27015-40-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

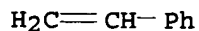
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 100-42-5

CMF C8 H8



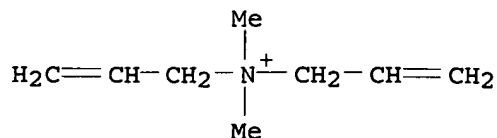
RN 717888-50-1 HCAPLUS

, CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

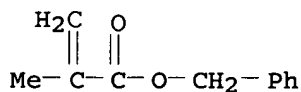


● Cl⁻

CM 2

CRN 2495-37-6

CMF C11 H12 O2



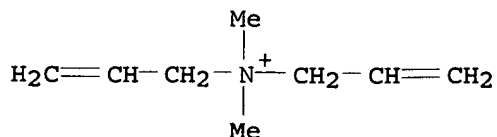
RN 890126-29-1 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA
INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

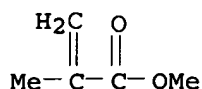


● Cl⁻

CM 2

CRN 80-62-6

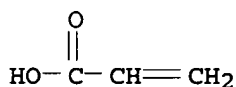
CMF C5 H8 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



IT 81094-86-2, Butyl methacrylate;diallyldimethylammonium chloride copolymer
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)
 (soil release improver; manuf. of hydrophobically modified cationic polymers for use as cleaning aids)

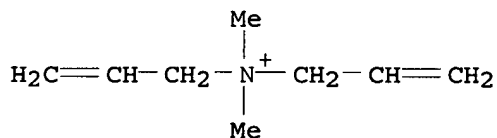
RN 81094-86-2 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

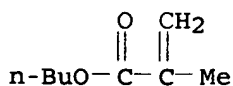
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 97-88-1

CMF C8 H14 O2



CC 46-5 (Surface Active Agents and Detergents)

ST diallylammonium salt cationic hydrophobic copolymer cleaning aid; antimicrobial soiling resistant biofilm suppression

cleaning compn
IT Polyelectrolytes
(cationic, soil release improver; manuf. of
hydrophobically modified cationic polymers for use as cleaning
aids)
IT Antimicrobial agents
Cleaning
Detergents
(manuf. of hydrophobically modified cationic polymers for use as
cleaning aids)
IT Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered
material use); USES (Uses)
(polymers, soil release improver; manuf. of
hydrophobically modified cationic polymers for use as cleaning
aids)
IT 177219-74-8P, Diallyldimethylammonium chloride;methyl
methacrylate copolymer 717888-49-8P,
Diallyldimethylammonium chloride;ethoxylated nonylphenol acrylate
graft copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
TEM (Technical or engineered material use); PREP (Preparation); USES
(Uses)
(soil release improver; manuf. of hydrophobically
modified cationic polymers for use as cleaning aids)
IT 27015-40-3, Diallyldimethylammonium chloride;styrene
copolymer 717888-50-1, Benzyl methacrylate;
diallyldimethylammonium chloride copolymer 890126-29-1,
Acrylic acid-diallyldimethylammonium chloride-methyl methacrylate
copolymer
RL: MOA (Modifier or additive use); TEM (Technical or engineered
material use); USES (Uses)
(soil release improver; manuf. of hydrophobically
modified cationic polymers for use as cleaning aids)
IT 81094-86-2, Butyl methacrylate;diallyldimethylammonium
chloride copolymer
RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(soil release improver; manuf. of hydrophobically
modified cationic polymers for use as cleaning aids)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:122195 HCAPLUS
DOCUMENT NUMBER: 144:214777
TITLE: Softening laundry detergent
INVENTOR(S): Binder, David, Alan; Murphy, Dennis, Stephen;
Orchowski, Michael
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever
Limited
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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MEI HUANG EIC1700 REM4B28 571-272-3952

07/17/2006

 WO 2006012984 A1 20060209 WO 2005-EP7612

200507
 11

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
 MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
 SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA,
 UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
 IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 2006030513 A1 20060209 US 2004-910737

200408
 03

PRIORITY APPLN. INFO.:

US 2004-910737

A

200408
 03

AB The invention is directed to laundry compns. which deliver both
 effective softening (softening parameter >70) and effective
 cleaning, contg.: (a) a cationic polymer having a wt.
 av. mol. wt. of less than about 850,000 daltons;
 (b) about 1% to about 60% nonionic oil (e.g., sucrose ester); and
 (c) at least about 5% surfactant, wherein the ratio of said cationic
 polymer to said nonionic oil as less than about 0.25. Ratio of any
 cationic surfactant to nonionic oil in **detergent** is <0.2.

IT 25136-75-8, Acrylamide-acrylic acid-diallyldimethylammonium
 chloride copolymer 26062-79-3,

Poly(diallyldimethylammonium chloride) 26590-05-6,
 Acrylamide-diallyldimethylammonium chloride copolymer

RL: MOA (Modifier or additive use); TEM (Technical or engineered
 material use); USES (Uses)

(softening laundry **detergents** contg. cationic polymers
 and nonionic oils)

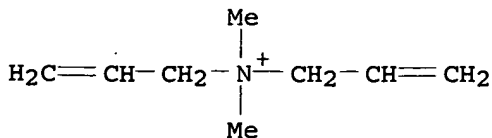
RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

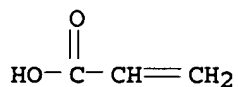
CRN 7398-69-8

CMF C8 H16 N . Cl

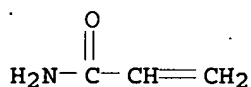


● Cl⁻

CM 2

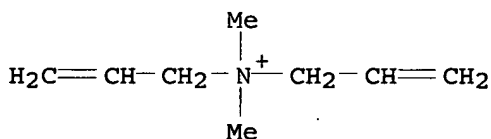
CRN 79-10-7
CMF C3 H4 O2

CM 3

CRN 79-06-1
CMF C3 H5 N O

RN 26062-79-3 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride,
homopolymer (9CI) (CA INDEX NAME)

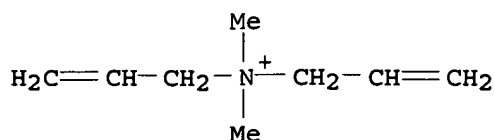
CM 1

CRN 7398-69-8
CMF C8 H16 N . Cl● Cl⁻

RN 26590-05-6 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8
CMF C8 H16 N . Cl

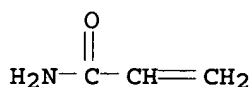


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D003-22
ICS C11D003-37; C11D003-20; C11D003-18; C11D003-16
CC 46-5 (Surface Active Agents and Detergents)
ST softening laundry **detergent** cationic polymer nonionic oil
IT Fatty acids, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(C8-14, esters with sucrose, Ryoto LWA 1570; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Dow Corning 37, nonionic oil; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(amino, oil; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT Polyelectrolytes
(cationic; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT Esters, uses
Ethers, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cyclic polyol, oils; softening laundry **detergents** contg. cationic polymers and nonionic oils)
IT **Detergents**
(laundry; softening laundry **detergents** contg. cationic polymers and nonionic oils)

- IT Glycerides, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(oil; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(polyether-, oil; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Alcohols, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(polyhydric, cyclic, esters or ethers, oils; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Carbohydrates, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(reduced, esters or ethers; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Polyethers, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(siloxane-, oil; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Fabric softeners
(softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT Hydrocarbon oils
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT 37266-93-6, Ryoto Sugar Ester L 595
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Ryoto L 595; softening laundry **detergents** contg. cationic polymers and nonionic oils)
- IT 57-50-1D, Sucrose, esters 25136-75-8, Acrylamide-acrylic acid-diallyldimethylammonium chloride copolymer 26062-79-3, Poly(diallyldimethylammonium chloride) 26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer 65497-29-2 68039-13-4, Poly(methacrylamidopropyltrimethylammonium chloride) 75150-29-7, Acrylamide-acrylamidopropyltrimethylammonium chloride copolymer 81859-24-7 95144-24-4, 3-Methyl-1-vinylimidazolium chloride-vinylpyrrolidone copolymer
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(softening laundry **detergents** contg. cationic polymers and nonionic oils)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:72372 HCAPLUS
DOCUMENT NUMBER: 144:152274
TITLE: Liquid **detergent** compositions with excellent cleaning power and stability and their manufacture

INVENTOR(S): Takiguchi, Hitoshi
 PATENT ASSIGNEE(S): Kao Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006022203	A2	20060126	JP 2004-201412	20040708
PRIORITY APPLN. INFO.:			JP 2004-201412	20040708

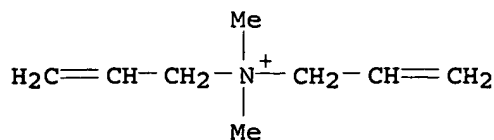
AB The compns. comprise (A) emulsified mixts. of droplets of optically isotropic surfactant phase contg. nonionic surfactants, stabilized by emulsifier polymers having anionic segments with affinity to an aq. soln. phase and segments having affinity to the surfactant phase, in the aq. soln. phase contg. electrolyte salts in an amt. to be incompatible with the surfactant phase, (B) adsorbent polymers having cationic segments, and (C) inorg. builder particles dispersing in the mixts., and are manufd. by blending the emulsifier polymers, electrolyte salts, emulsified mixts. contg. the nonionic surfactants and H₂O, and inorg. builder particles, and further blending the adsorbent polymers. Thus, 150 g polyethylene glycol monomethacrylate (NK Ester M 900G) and 150 g methacrylic acid were polymd. in an aq. propylene glycol soln. in the presence of 2-mercaptoethanol, Na₂S₂O₈, and H₂O₂ to give a emulsifier polymer soln., 5.3 g (0.7% as polymer in final compn.) of which was added to a soln. of aq. 50% K₂CO₃ 50.9, propylene glycol 7.3, ethylene glycol 6.5, and 50% citric acid soln. 3.2 g, mixed with 64.7 g nonionic surfactant (Softanol 70), emulsified, mixed with an aq. dispersion contg. 50% K₂CO₃ 46.1, polydiallyldimethylammonium chloride (Merquat 100) 5.3, and zeolite A 64.7 g, and stirred to give a **detergent** compn. showing good cleaning power against **soiled** fabric and viscosity 540 mPa-s.

IT 26062-79-3, Merquat 100
 RL: MOA (Modifier or additive use); USES (Uses)
 (adsorbent; manuf. of liq. **detergent** compns. with good cleaning power and stability)

RN 26062-79-3 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8
 CMF C8 H16 N . Cl



● Cl⁻

- CC 46-6 (Surface Active Agents and Detergents)
- ST polyethylene glycol methacrylate methacrylic acid polymer emulsifier
detergent; polydiallyldimethylammonium chloride blend liq
detergent stability
- IT Alcohols, uses
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(C12-14-secondary, ethoxylated, Softanol 70; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(acrylic, graft, emulsifier; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT **Detergents**
(liq.; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT A zeolites
Polyoxyalkylenes, uses
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT Surfactants
(nonionic; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT Emulsifying agents
(polymeric; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT 26161-33-1P, Poly(methacryloyloxyethyltrimethylammonium chloride)
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(adsorbent; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT 26062-79-3, Merquat 100
RL: MOA (Modifier or additive use); USES (Uses)
(adsorbent; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT 223122-81-4P, Ethylene oxide-methacrylic acid graft copolymer methyl ether
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(comprised of actual and assumed monomers, emulsifier; manuf. of liq. **detergent** compns. with good cleaning power and stability)
- IT 111740-39-7P, Methacrylic acid-NK Ester M 900G graft copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
PREP (Preparation); USES (Uses)
(emulsifier; manuf. of liq. **detergent** compns. with good
cleaning power and stability)
IT 77-92-9, Citric acid, uses
RL: MOA (Modifier or additive use); USES (Uses)
(manuf. of liq. **detergent** compns. with good cleaning
power and stability)
IT 584-08-7, Potassium carbonate 25322-68-3D, Polyethylene glycol,
alkyl ethers
RL: PEP (Physical, engineering or chemical process); PRP
(Properties); PYP (Physical process); TEM (Technical or engineered
material use); PROC (Process); USES (Uses)
(manuf. of liq. **detergent** compns. with good cleaning
power and stability)
IT 57-55-6, Propylene glycol, uses 107-21-1, Ethylene glycol, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(manuf. of liq. **detergent** compns. with good cleaning
power and stability)

L35 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:54485 HCAPLUS
DOCUMENT NUMBER: 144:129736
TITLE: Quaternary ammonium group-containing copolymers
for cleaning compositions
INVENTOR(S): Komatsu, Masanori; Maruyama, Takanobu;
Kabashima, Shin-Ichiro; Hueerlaender, Doris;
Frey, Stefan; Dreja, Michael; Hattemer, Erik;
Ziganke, Kerstin
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien,
Germany; Lion Corporation
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006005358	A1	20060119	WO 2004-EP7645	

200407
10

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: WO 2004-EP7645

200407
10

AB The invention relates to copolymers consisting of the following amts. of copolymd. ethylenically unsatd. monomers: 5 to 99% of one or more anionic vinyl monomers (A); 0.01 to 50% of one or more vinyl monomers (B) comprising a quaternary ammonium group or tertiary amino group; 0.5 to 80% of one or more nonionic hydrophilic vinyl monomers (C) and/or 0.1 to 15% of one or more polyfunctional vinyl monomers (F); 0 to 30% of one or more hydrophobic vinyl monomers (D); and 0 to 20% of one or more vinyl monomers (E) contg. silicone moieties; and wherein the sum of the monomers (A), (B), (C), (D), (E) and (F) is 100%. The invention further concerns the use of those copolymers as anti-soil agents and surface-treating agents, as well as cleaning compns. contg. one or more of the copolymers and a method of their manuf. A polymer was prepd. from 2-acrylamido-2-methylpropanesulfonic acid, sodium salt, methacrylic acid, polyethylene glycol Me ether methacrylate, and 3-trimethylammoniumpropylmethacrylamide chloride.

IT 873652-81-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(quaternary ammonium group-contg. copolymers for cleaning compns.)

RN 873652-81-4 HCAPLUS

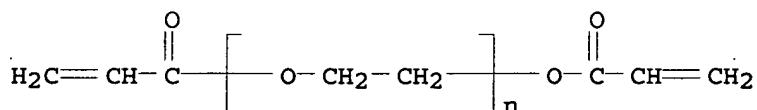
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 26570-48-9

CMF (C2 H4 O)_n C6 H6 O3

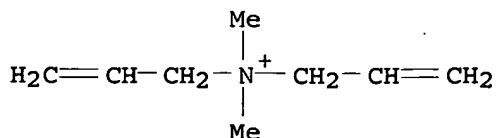
CCI PMS



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

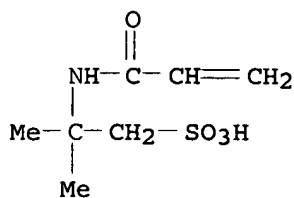


● Cl⁻

CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

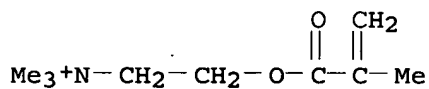


● Na

CM 4

CRN 5039-78-1

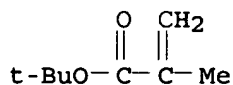
CMF C9 H18 N O2 . Cl

● Cl⁻

CM 5

CRN 585-07-9

CMF C8 H14 O2



IC ICM C08F020-00

CC 37-3 (Plastics Manufacture and Processing)

IT Detergents

(cleaning compns., aq.; quaternary ammonium group-contg. copolymers for cleaning compns.)

IT 873652-68-7P 873652-69-8P 873652-70-1P 873652-71-2P

873652-72-3P 873652-73-4P 873652-74-5P 873652-75-6P

873652-76-7P 873652-77-8P 873652-78-9P 873652-79-0P

873652-80-3P 873652-81-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM

(Technical or engineered material use); PREP (Preparation); USES
(Uses)
(quaternary ammonium group-contg. copolymers for cleaning
compsns.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:497467 HCAPLUS
DOCUMENT NUMBER: 143:9567
TITLE: Softening laundry **detergent** and
conditioning/cleaning fabrics
INVENTOR(S): Binder, David Alan; Murphy, Dennis Stephen;
Orchowski, Michael
PATENT ASSIGNEE(S): Unilever Home & Personal Care USA, USA
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005124528	A1	20050609	US 2003-727234	20031203
US 7012054	B2	20060314		
WO 2005054419	A1	20050616	WO 2004-EP13161	20041118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL,
PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-727234 A 20031203

AB The fabric and textile conditioning comps. with improved
particulate soil cleaning ability, contain particular
combinations of cationic polymers and anionic surfactants in
combination with a polyvinylpyrrolidone/amphiphilic carboxy-contg.
polymer anti-redeposition system. More specifically the comps.
contain (a) .gtorsim.5% ≥ 1 anionic surfactant, (b)
.apprx.0.01-5% ≥ 1 amphiphilic carboxy contg. polymer, (c)
.apprx.0.05-3% polyvinylpyrrolidone, and (d) ≥ 1 cationic
conditioning polymer. The cationic polymers are preferably below a
particular mol. wt. to afford optimal cleaning and conditioning, and
must be present in an effective amt. to yield a substantial

conditioning benefit.

IT 25136-75-8, Diallyldimethylammonium chloride-acrylic acid-acrylamide copolymer 26062-79-3, Polydimethyl diallylammonium chloride 26590-05-6, Dimethyl diallylammonium chloride/ acrylamide copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(softening laundry **detergent** for fabrics without soil redeposition)

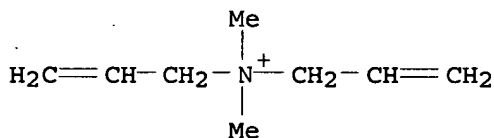
RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

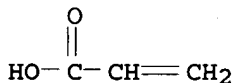


● Cl⁻

CM 2

CRN 79-10-7

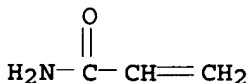
CMF C3 H4 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O

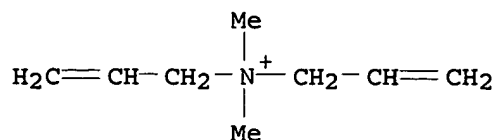


RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8
CMF C8 H16 N . Cl

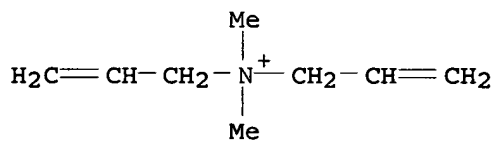


● Cl⁻

RN 26590-05-6 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

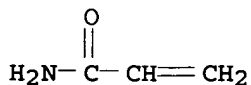
CRN 7398-69-8
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 79-06-1
CMF C3 H5 N O



IC ICM C11D003-37
INCL 510475000
CC 46-5 (Surface Active Agents and Detergents)
ST cationic polymer anionic surfactant softening laundry
detergent fabric
IT Surfactants
(anionic; softening laundry detergent for fabrics
without soil redeposition)
IT Detergents
(laundry; softening laundry detergent for fabrics
without soil redeposition)
IT Fabric softeners

(softening laundry detergent for fabrics without
soil redeposition)

IT 9000-30-0D, Guar, cationic 9003-39-8, Polyvinylpyrrolidone
25136-75-8, Diallyldimethylammonium chloride-acrylic
acid-acrylamide copolymer 26062-79-3, Polydimethyl
diallylammonium chloride 26590-05-6, Dimethyl
diallylammonium chloride/ acrylamide copolymer 56780-58-6
65497-29-2 68039-13-4, Polymethacrylamidopropyl trimethylammonium
chloride 81859-24-7, LR 400 95144-24-4 505082-01-9, Alcosperse
725

RL: POF (Polymer in formulation); TEM (Technical or engineered
material use); USES (Uses)

(softening laundry detergent for fabrics without
soil redeposition)

IT 98-11-3D, Benzenesulfonic acid, alkyl derivs., sodium salts

RL: TEM (Technical or engineered material use); USES (Uses)

(softening laundry detergent for fabrics without
soil redeposition)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L35 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:453799 HCAPLUS

DOCUMENT NUMBER: 143:9563

TITLE: Laundry compositions having copolymers
containing polyalkylene oxide groups and
quaternary nitrogen atoms and a surfactant
system

INVENTOR(S): Reddy, Pramod Kakumanu; Song, Xinbei; Detering,
Jurgen; Pheiffer, Thomas

PATENT ASSIGNEE(S): Germany

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005113280	A1	20050526	US 2004-993889	200411 21
WO 2005052107	A1	20050609	WO 2004-US39042	200411 19

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL,
PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2003-524370P

P

200311

21

AB The **detergent** compn. comprises a copolymer contg. polyalkylene oxide type macromers, monomers having quaternary N atoms and other optional monomers, and surfactant system. The **detergent** compn. shows excellent clay soil particle dispersibility and can prevent the redeposition of soil on fabric and hard surfaces during washing.

IT 852357-05-2P 852360-68-0P, Diallyldimethylammonium chloride-ethylene oxide-methacrylic acid graft copolymer methyl ether

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(laundry **detergents** contg. cationic polyalkylene oxide type macromer copolymers and surfactant system)

RN 852357-05-2 HCAPLUS

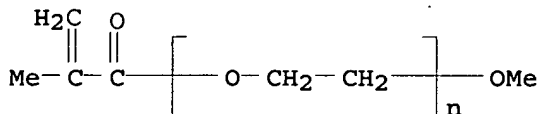
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-methyl-2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

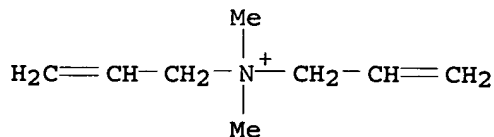
CCI PMS



CM 2

CRN 7398-69-8

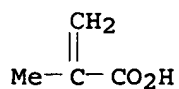
CMF C8 H16 N . Cl

● Cl⁻

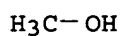
CM 3

CRN 79-41-4

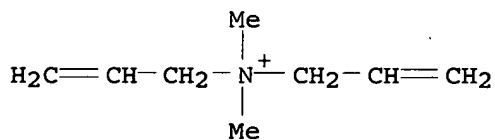
CMF C4 H6 O2



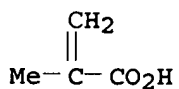
RN 852360-68-0 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with 2-methyl-2-propenoic acid and oxirane, methyl ether, graft
 (9CI) (CA INDEX NAME)
 CM 1
 CRN 67-56-1
 CMF C H4 O



CM 2
 CRN 852360-67-9
 CMF (C8 H16 N . C4 H6 O2 . C2 H4 O . Cl)x
 CCI PMS
 CM 3
 CRN 7398-69-8
 CMF C8 H16 N . Cl



CM 4
 CRN 79-41-4
 CMF C4 H6 O2



CM 5
 CRN 75-21-8

CMF C2 H4 O



IC ICM C11D003-37
 INCL 510475000
 CC 46-5 (Surface Active Agents and Detergents)
 ST polyalkylene oxide macromer comonomer quaternary ammonium compd
detergent; soil dispersibility release laundry
detergent macromer copolymer
 IT Polyoxyalkylenes, uses
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (acrylic, graft; laundry **detergents** contg. cationic
 polyalkylene oxide type macromer copolymers and surfactant
 system)
 IT Dispersing agents
 (cationic; laundry **detergents** contg. cationic
 polyalkylene oxide type macromer copolymers and surfactant
 system)
 IT Surfactants
 (laundry **detergents** contg. cationic polyalkylene oxide
 type macromer copolymers and surfactant system)
 IT **Detergents**
 (laundry; laundry **detergents** contg. cationic
 polyalkylene oxide type macromer copolymers and surfactant
 system)
 IT 515146-32-4P, 3-Methacryloylaminopropyltrimethylammonium
 chloride-polyethylene glycol methacrylate methyl ether graft
 copolymer 515867-10-4P, Ethylene oxide-3-
 methacryloylaminopropyltrimethylammonium chloride graft copolymer
 methyl ether 852357-03-0P, 3-Methyl-1-vinylimidazolium methyl
 sulfate-polyethylene glycol methacrylate methyl ether graft
 copolymer 852357-04-1P 852357-05-2P 852357-06-3P
 852360-64-6P, Ethylene oxide-3-methyl-1-vinylimidazolium methyl
 sulfate graft copolymer methyl ether 852360-66-8P,
 2-Acrylamido-2-methylpropanesulfonic acid sodium salt-ethylene
 oxide-3-methyl-1-vinylimidazolium methyl sulfate graft copolymer
 methyl ether 852360-68-0P, Diallyldimethylammonium
 chloride-ethylene oxide-methacrylic acid graft copolymer methyl
 ether 852360-70-4P, 2-Acrylamido-2-methylpropanesulfonic acid
 sodium salt-ethylene oxide-methacrylamidopropyltrimethylammonium
 chloride graft copolymer methyl ether
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (laundry **detergents** contg. cationic polyalkylene oxide
 type macromer copolymers and surfactant system)

L35 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:447117 HCAPLUS

DOCUMENT NUMBER: 140:425281

TITLE: Solid cleaner compositions for flush toilets
with suppressed redeposition of soilsINVENTOR(S): Hayakawa, Toshiharu; Komatsu, Yosuke; Aihara,
Shin; Tsukuda, Kazunori

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

DOCUMENT TYPE: CODEN: JKXXAF
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: Japanese
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004155803	A2	20040603	JP 2002-319838	20021101
PRIORITY APPLN. INFO.:				20021101

AB The compns., useful for cleaning toilet bowls with flushed water in which the compns. are dissolved, contain polymers (A) with Mw 2000-80,000 having 10-100 mol% monomer units bearing ≥ 1 amino groups and/or quaternary ammonium salts, compds. (B) with mol. wt. < 1000 bearing ≥ 1 quaternary ammonium groups and ≥ 1 C8-16 alkyl groups, and compds. (C) bearing ≥ 1 C12-20 hydrocarbon groups and polyoxyalkylene groups (av. addn. mol no. 50-200). Thus, a compn. contg. diallyldimethylammonium chloride-maleic acid-sulfur dioxide copolymer 10, Sanisol C (cocoalkyldimethylbenzylammonium chloride) 10, and Emanon 3199 (polyethylene glycol monostearate) 60 parts showed good antisoiling properties for 8 wk.

IT 64598-61-4, Diallyldimethylammonium chloride-maleic acid-sulfur dioxide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(solid cleaners for flush toilets with suppressed redeposition of soils)

RN 64598-61-4 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with (2Z)-2-butenedioic acid and sulfur dioxide (9CI) (CA INDEX NAME)

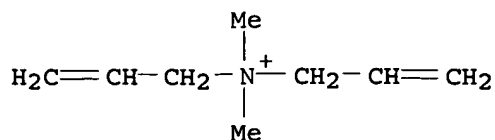
CM 1

CRN 7446-09-5
CMF 02 S

O=S=O

CM 2

CRN 7398-69-8
CMF C8 H16 N . Cl

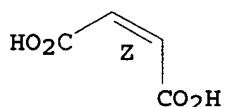
● Cl⁻

CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



IC ICM C11D003-37
ICS C11D001-62; C11D017-00

CC 46-6 (Surface Active Agents and Detergents)

ST solid cleaner flush toilet diallyldimethylammonium polymer; toilet redeposition prevention quaternary ammonium **detergent**

IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(derivs.; solid cleaners for flush toilets with suppressed redeposition of **soils**)

IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers; solid cleaners for flush toilets with suppressed redeposition of **soils**)

IT **Detergents**
Toilets
(solid cleaners for flush toilets with suppressed redeposition of **soils**)

IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(solid cleaners for flush toilets with suppressed redeposition of **soils**)

IT 122-18-9, Sanisol C 123-03-5, Cetylpyridinium chloride
7173-51-5, Didecyldimethylammonium chloride 9004-99-3, Emanon 3199
9005-08-7, Emanon 3299 50658-91-8 **64598-61-4**,
Diallyldimethylammonium chloride-maleic acid-sulfur dioxide
copolymer 692749-29-4
RL: TEM (Technical or engineered material use); USES (Uses)
(solid cleaners for flush toilets with suppressed redeposition of **soils**)

L35 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:220519 HCAPLUS

DOCUMENT NUMBER: 140:255344

TITLE: Textile rinsing formulation

INVENTOR(S): Geffroy, Cedric
 PATENT ASSIGNEE(S): Rhodia Chimie, Fr.; Rhone Poulenc Chimie
 SOURCE: PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022839	A2	20040318	WO 2003-FR2665	20030908
WO 2004022839	A3	20040506		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003278279	A1	20040329	AU 2003-278279	20030908
EP 1537271	A2	20050608	EP 2003-769587	20030908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014149	A	20050712	BR 2003-14149	20030908
JP 2005538262	T2	20051215	JP 2004-533581	20030908
US 2005028293	A1	20050210	US 2003-658577	20030909
PRIORITY APPLN. INFO.:			US 2002-409164P	P
			WO 2003-FR2665	W
				20030908

AB The invention relates to a formulation which is used to rinse textiles in a hydroalcoholic or aq. medium during laundering. The inventive formulation consists of active substance based on a liq. or solid hydrophobic organosiloxane or org. material in particulate form, a surfactant, and a carrier based on a water-sol. org. polymer, which facilitates deposition of the active substance on

textiles during rinsing. A typical water-dilutable compn. for rinsing textiles to impart creaseproofing was prepd. by mixing 20 mL emulsion contg. 30% Lubrirob TOD18.80 (sunflower oil) and 3% cetyltrimethylammonium bromide at pH 4 with 1 mL 2.2% aq. soln of 1:1 acrylic acid-DADMAC copolymer (mol. wt. 100,000).

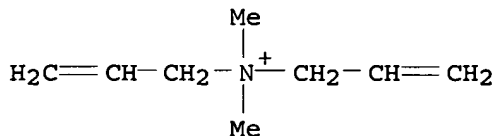
IT 53694-17-0, Acrylic acid-DADMAC copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (aq. and aq.-alc. compns. contg. surfactants and water-sol. polymers that facilitate deposition of hydrophobic org. compds. or organosiloxanes onto textiles during rinsing in laundry)

RN 53694-17-0 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

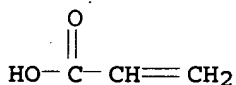


● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM D06M013-00

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 40

IT Creaseproofing

Laundering

Soilproofing

Surfactants

(aq. and aq.-alc. compns. contg. surfactants and water-sol. polymers that facilitate deposition of hydrophobic org. compds. or organosiloxanes onto textiles during rinsing in laundry)

IT 53694-17-0, Acrylic acid-DADMAC copolymer

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(aq. and aq.-alc. compns. contg. surfactants and water-sol. polymers that facilitate deposition of hydrophobic org. compds. or organosiloxanes onto textiles during rinsing in laundry)

L35 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:220414 HCAPLUS
 DOCUMENT NUMBER: 140:255337
 TITLE: Polymer-based textile rinsing formulation
 INVENTOR(S): Geffroy, Cedric
 PATENT ASSIGNEE(S): Rhodia Chimie, Fr.; Rhone Poulenc Chimie
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022680	A2	20040318	WO 2003-FR2648	20030908
WO 2004022680	A3	20040506		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003278263	A1	20040329	AU 2003-278263	20030908
US 2005097678	A1	20050512	US 2003-657980	20030909
PRIORITY APPLN. INFO.:			US 2002-409168P	P
			WO 2003-FR2648	W
				20030908

AB The invention relates to a formulation which is used to rinse textiles in a hydroalcoholic or aq. medium during laundering. The inventive formulation consists of active substance based on a solid hydrophobic org. polymer in particulate form, a surfactant, and a carrier based on a water-sol. org. polymer, which facilitates the deposition of the active substance on the textiles during rinsing. A typical dilutable rinsing formulation for imparting creaseproofing to textiles was prepd. by adding 20 mL 28% solids dispersion of polybutyl acrylate contg. the 10 parts cetyltrimethylammonium chloride to 1 mL 2.2% aq. soln. of 1:1 acrylic acid-DADMAC copolymer.

IT 53694-17-0, Acrylic acid-DADMAC copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered

material use); USES (Uses)

(water-sol. polymer; aq. and aq.-alc. compns. contg. surfactants and hydrophilic polymers that facilitate deposition of hydrophobic polymers on fabrics during rinsing in laundry)

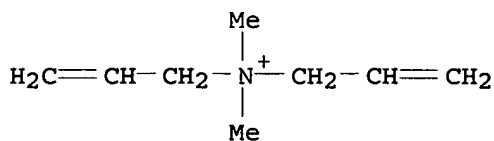
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

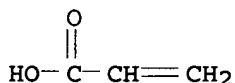


● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C11D003-00

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 40

IT Creaseproofing

Laundering

Soilproofing

Surfactants

(aq. and aq.-alc. compns. contg. surfactants and hydrophilic polymers that facilitate deposition of hydrophobic polymers on fabrics during rinsing in laundry)

IT 11138-66-2, Rhodopol T 26655-25-4, Acrylic acid-dimethylaminoethyl methacrylate copolymer 39454-79-0, Carboxymethyl hydroxypropyl

guar 51198-15-3, Carboxymethyl guar 53694-17-0, Acrylic

acid-DADMAC copolymer 71010-52-1, Gellan gum 73667-50-2,

Succinoglycan 96949-21-2, Rhamsan gum 96949-22-3, Welan gum

142175-66-4, Acrylic acid-MAPTAC copolymer 210555-56-9

442123-78-6

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(water-sol. polymer; aq. and aq.-alc. compns. contg. surfactants and hydrophilic polymers that facilitate deposition of hydrophobic polymers on fabrics during rinsing in laundry)

L35 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:142921 HCAPLUS
 DOCUMENT NUMBER: 140:204778
 TITLE: Silicone and cationized polymer-containing
detergent compositions
 INVENTOR(S): Terada, Eiji
 PATENT ASSIGNEE(S): Kao Corporation, Japan
 SOURCE: PCT Int. Appl., 29 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014326	A1	20040219	WO 2003-JP10138	20030808
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004067638	A2	20040304	JP 2002-232732	20020809
AU 2003256071	A1	20040225	AU 2003-256071	20030808
EP 1531783	A1	20050525	EP 2003-784612	20030808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1671346	A	20050921	CN 2003-818246	20030808
US 2006052273	A1	20060309	US 2005-522616	20050131
PRIORITY APPLN. INFO.:)			JP 2002-232732	A 20020809
			WO 2003-JP10138	W 20030808

AB A **detergent** compn. is provided comprising (a) an anionic surfactant, (b) a water sol. cationized polymer having a wt

. av. mol. wt. of 100,000 to 2,000,000 and a charge d. of 0.6 to 4 meq/g, and (c) a silicone deriv. having a group contg. both a hydroxy group and a nitrogen atom as a side chain thereof bonded to a silicon atom. The detergent compn. provides rich foaming during washing and at the same time is capable of giving excellent conditioning effects to the hair and the like. For example, a conditioning shampoo was prepd. contg. (by wt.) sodium polyoxyethylene (2) lauryl ether sulfate 11.0, cationized cellulose (UCare Polymer JR 30M) 0.4, silicone deriv. (Conditioning Agent 8500 from Dow Corning) 1.0, dimethylpolysiloxane (viscosity of 100,000 mPa s) 0.5, cocoamidopropyl betaine 3.0, cocamide MEA 0.5, ethylene glycol distearyl ester 1.0, sodium chloride 0.5, perfume, citric acid as needed, and water to 100%. The shampoo thus obtained (having pH of 6.0 when dild. to 20 times the wt.) was excellent in smoothness and softness of the hair during the period of time from foaming to rinsing, and smoothness after drying.

IT 26590-05-6, Merquat 550 92183-41-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair conditioning shampoos contg. polysiloxane and cationized polymer)

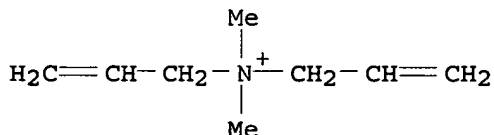
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

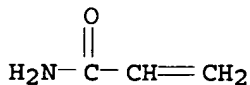


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O

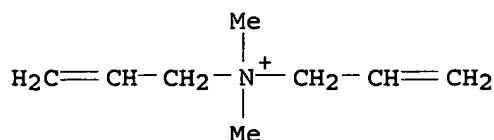


RN 92183-41-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 9004-62-0
CMF C2 H6 O2 . x Unspecified

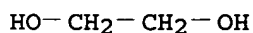
CM 3

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 107-21-1
CMF C2 H6 O2



IC ICM A61K007-075

ICS A61K007-50; C11D001-65

CC 62-3 (Essential Oils and Cosmetics)

ST cationic polymer polysiloxane **detergent** hair conditioning
shampoo

IT **Detergents**

(hair conditioning shampoos contg. polysiloxane and cationized
polymer)

IT 56-81-5, Glycerin, biological studies 77-92-9, Citric acid,
biological studies 79-10-7D, Acrylic acid, alkyl amino derivs.,
copolymers with vinylcaprolactam and vinylpyrrolidone 88-12-0D,
copolymers with alkyl amino acrylate and vinylcaprolactam
88-12-0D, polymers with quaternized vinylimidazole 112-72-1,
Myristyl alcohol 124-04-9D, Adipic acid, polymers with
dimethylaminohydroxypropylethylenetriamine() 151-21-3, Sodium
lauryl sulfate, biological studies 627-83-8, Ethylene glycol
distearate 1072-63-5D, 1-Vinylimidazole, quaternized, polymers
with vinylpyrrolidone 2235-00-9D, Vinylcaprolactam, copolymers
with alkyl amino acrylate and vinylpyrrolidone 2867-47-2D,
Dimethylaminoethyl methacrylate, quaternized, polymers with
vinylpyrrolidone 9000-30-0D, Guar gum, cationic 9003-39-8D,
Polyvinylpyrrolidone, derivs., quaternized 9004-34-6D, Cellulose,

cationic 9004-82-4, Sodium polyoxyethylene lauryl ether sulfate
 9005-25-8D, Starch, cationic 9016-00-6, Dimethylpolysiloxane
 17301-53-0, Behenyltrimonium chloride 26590-05-6, Merquat
 550 36653-82-4, Cetanol 65497-29-2, Jaguar C 13S
 92183-41-0 131954-48-8 660816-85-3, Conditioning Agent
 8500

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair conditioning shampoos contg. polysiloxane and cationized
 polymer)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN
 THE RE FORMAT

L35 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:980833 HCAPLUS

DOCUMENT NUMBER: 140:28778

TITLE: Cleaning composition containing a hydrophilizing
 polymer

INVENTOR(S): Dastbaz, Nathalie; Ewbank, Eric

PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA

SOURCE: U.S., 3 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6664218	B1	20031216	US 2002-245155	20020917
CA 2499338	AA	20040401	CA 2003-2499338	20030916
WO 2004027008	A1	20040401	WO 2003-US28960	20030916
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003267217	A1	20040408	AU 2003-267217	20030916
EP 1539910	A1	20050615	EP 2003-749688	20030916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

BR 2003014398 A 20050719 BR 2003-14398 200309
16

NO 2005001860 A 20050415 NO 2005-1860 200504
15

PRIORITY APPLN. INFO.: US 2002-245155 A 200209
17

WO 2003-US28960 W 200309
16

AB A compn. for cleaning of various soils on hard surfaces
contains a zwitterionic surfactant (e.g.,
cocoamidopropyldimethylbetaine), a glycol ether cosurfactant, a
hydrophilizing polymer [e.g., Mirapol Surf S 210 (acrylic
acid-diallyldimethylammonium chloride-acrylamide copolymer)], and
water. The cleaning compn. can prevent build-up of soap scum and be
dried without rinsing and wiping.

IT 25136-75-8, Acrylic acid-acrylamide diallyldimethylammonium
chloride copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(Mirapol Surf S 210; manuf. of cleaning compn. contg. a
hydrophilizing polymer)

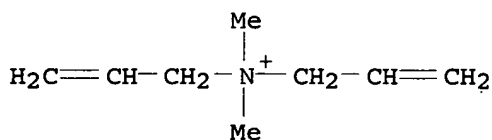
RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

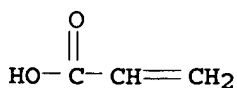
CMF C8 H16 N . Cl



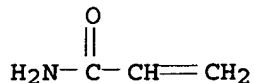
● Cl⁻

CM 2

CRN 79-10-7
CMF C3 H4 O2



CM 3

CRN 79-06-1
CMF C3 H5 N O

IC ICM C11D017-00
INCL 510180000; 510181000; 510182000; 510238000; 510475000; 510476000;
510480000; 510586000; 510490000
CC 46-6 (Surface Active Agents and Detergents)
IT Detergents
(cleaning compns.; manuf. of cleaning compn. contg. a
hydrophilizing polymer)
IT 25136-75-8, Acrylic acid-acrylamide diallyldimethylammonium
chloride copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(Mirapol Surf S 210; manuf. of cleaning compn. contg. a
hydrophilizing polymer)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:932313 HCAPLUS
DOCUMENT NUMBER: 139:383098
TITLE: Use of an amphoteric copolymer as an
anti-redeposition agent in a dishwashing machine
detergent composition
INVENTOR(S): Aubay, Eric; Embleton, Garry
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.; Rhone Poulenc Chimie
SOURCE: Fr. Demande, 23 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2839977	A1	20031128	FR 2002-6434	200205 27
FR 2839977	B1	20050812		
WO 2003099980	A1	20031204	WO 2003-FR1582	200305 26

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

AU 2003255604	A1	20031212	AU 2003-255604	200305 26
BR 2003004924	A	20040928	BR 2003-4924	200305 26
EP 1507844	A1	20050223	EP 2003-755203	200305 26
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1656204	A	20050817	CN 2003-812053	200305 26
JP 2005527686	T2	20050915	JP 2004-508222	200305 26
US 2004005990	A1	20040108	US 2003-445481	200305 27
PRIORITY APPLN. INFO.:			FR 2002-6434	A 200205 27
			WO 2003-FR1582	W 200305 26

AB **Soil repellents for machine dishwashing detergents**
 are based on copolymers of (a) ≥ 1
 $\text{CH}_2:\text{CR}_1(\text{CH}_2)_n\text{N}+\text{R}_2\text{R}_3(\text{CH}_2)_m\text{CR}_4:\text{CH}_2 \text{ X-}$ ($\text{R}_1, \text{R}_4 = \text{H}$ or C1-6 alkyl , $\text{R}_2,$
 $\text{R}_3 = \text{C1-6 alkyl}$, C1-6 hydroxyalkyl , C1-6 aminoalkyl , $n, m = 1-3$, X-
 $=$ counterion compatible with the water-soly. or water-dispersibility
 of the polymer), (b) ≥ 1 monomer having a hydrophilic,
 ionizable acid group, and, optionally, (c) ≥ 1 neutral
 ethylenically unsatd. compd. having ≥ 1 hydrophilic groups,
 with the (a)-(b) ratio being (15-50):(50-85).

IT **53694-17-0**, Acrylic acid-diallyldimethylammonium chloride
 copolymer **126842-83-9**, Diallyldimethylammonium
 chloride-maleic acid copolymer **234429-51-7**,
 Diallyldimethylammonium chloride-itaconic acid copolymer
 RL: MOA (Modifier or additive use); TEM (Technical or engineered
 material use); USES (Uses)
 (amphoteric quaternary ammonium polymers as **soil**
 repellents for machine dishwashing **detergents**)

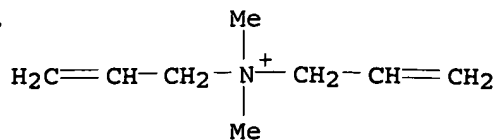
RN **53694-17-0** HCAPLUS

CN **2-Propen-1-aminium**, **N,N-dimethyl-N-2-propenyl-**, chloride, polymer
 with **2-propenoic acid (9CI)** (CA INDEX NAME)

CM 1

CRN 7398-69-8

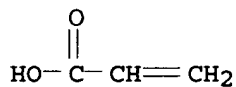
CMF C8 H16 N . Cl



CM 2

CRN 79-10-7

CMF C3 H4 O2



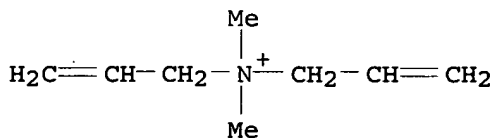
RN 126842-83-9 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with (2Z)-2-butenedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

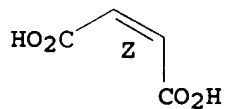


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



RN 234429-51-7 HCAPLUS

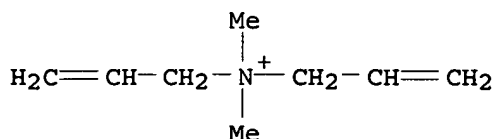
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer

with methylenebutanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

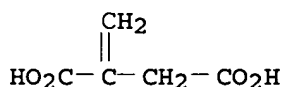


● Cl⁻

CM 2

CRN 97-65-4

CMF C5 H6 O4



IC ICM C11D003-37

ICS C11D001-66

CC 46-6 (Surface Active Agents and Detergents)

ST amphoteric quaternary ammonium polymer **soil** repellent
dishwashing **detergent**; dialkenylammonium compd copolymer
soil repellent machine dishwashing **detergent**

IT Amphoteric materials

Soilproofing agents

(amphoteric quaternary ammonium polymers as **soil**
repellents for machine dishwashing **detergents**)

IT **Detergents**

(dishwashing; amphoteric quaternary ammonium polymers as
soil repellents for machine dishwashing
detergents)

IT Quaternary ammonium compounds, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered
material use); USES (Uses)

(polymers; amphoteric quaternary ammonium polymers as
soil repellents for machine dishwashing
detergents)

IT 53694-17-0, Acrylic acid-diallyldimethylammonium chloride
copolymer 126842-83-9, Diallyldimethylammonium
chloride-maleic acid copolymer 234429-51-7,

Diallyldimethylammonium chloride-itaconic acid copolymer

RL: MOA (Modifier or additive use); TEM (Technical or engineered
material use); USES (Uses)

(amphoteric quaternary ammonium polymers as **soil**
repellents for machine dishwashing **detergents**)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:855637 HCAPLUS
 DOCUMENT NUMBER: 139:325087
 TITLE: Cationic copolymer for reducing and preventing
 soil redeposition in an automatic
 dishwashing machine, rinse or cleaning
 composition
 INVENTOR(S): Aubay, Eric
 PATENT ASSIGNEE(S): Rhodia Chimie, USA
 SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of
 U.S. Ser. No. 207,303.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 2003203825	A1	20031030	US 2003-445591	200305 27
US 6924260	B2	20050802		
FR 2796390	A1	20010119	FR 1999-9183	199907 15
FR 2796390	B1	20011026		
US 2003083223	A1	20030501	US 2002-207303	200207 29
US 6593288	B2	20030715		
US 2003203826	A1	20031030	US 2003-445605	200305 27
US 6767410	B2	20040727		
PRIORITY APPLN. INFO.:			FR 1999-9183	A 199907 15
			US 2000-596586	B1 200006 19
			US 2002-207303	A2 200207 29

AB The use of a water-sol. or water-dispersible copolymer comprising
 polycond. units of ≥ 1 monomer compd. bearing a quaternary NH_4^+
 group (a), ≥ 1 hydrophilic monomer (b) bearing acidic groups,
 optionally (c) other ethylenically unsatd. hydrophilic monomer and,
 with a/b molar ratio 50/50 and 10/90, in a **detergent** is
 responsible for reducing or preventing soil redeposition
 on kitchen- and tableware cleaned in an automatic dishwashing
 machine. The test polymer is dissolved in demineralized water
 contg. 0.5 g/L Symperonic A7 nonionic surfactant, at a concn. 0.5

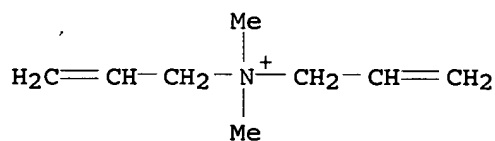
g/L or 0.1 g/L and the pH is adjusted, by adding NaOH, to pH 9.
 IT 82066-30-6 213127-10-7
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)
 (for reducing and preventing soil redeposition in an
 automatic dishwashing machine)
 RN 82066-30-6 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with 2-propenamide and 2-propenoic acid, sodium salt (9CI) (CA
 INDEX NAME)

CM 1

CRN 25136-75-8
 CMF (C8 H16 N . C3 H5 N O . C3 H4 O2 . Cl)x
 CCI PMS

CM 2

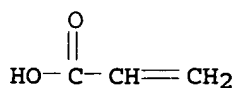
CRN 7398-69-8
 CMF C8 H16 N . Cl



● Cl⁻

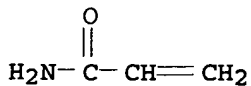
CM 3

CRN 79-10-7
 CMF C3 H4 O2



CM 4

CRN 79-06-1
 CMF C3 H5 N O



RN 213127-10-7 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer

with 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 53694-17-0

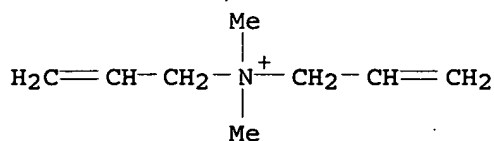
CMF (C8 H16 N . C3 H4 O2 . Cl)x

CCI PMS

CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

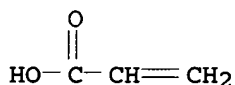


● Cl⁻

CM 3

CRN 79-10-7

CMF C3 H4 O2



IC ICM C11D001-00

INCL 510220000; X51-022.9; X51-022.3; X51-047.5

CC 46-5 (Surface Active Agents and Detergents)

ST diallyldimethylammonium chloride polymer **anti soil**
redeposition automatic dishwashing

IT **Detergents**

(dishwashing; reducing and preventing **soil** redeposition
in an automatic dishwashing machine)

IT 82066-30-6 213127-10-7

RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)

(for reducing and preventing **soil** redeposition in an
automatic dishwashing machine)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L35 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:678927 HCAPLUS

DOCUMENT NUMBER: 139:199106

TITLE: Polymeric **antifouling**
detergent for hard surfaces

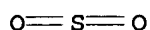
INVENTOR(S): Aihara, Shin; Komatsu, Yosuke; Tsukuda,

PATENT ASSIGNEE(S): Kazunori; Miyanaga, Seiichi; Shiba, Kenichi
 SOURCE: Kao Corporation, Japan
 PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

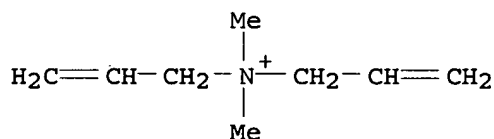
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003070867	A1	20030828	WO 2003-JP1940	20030221
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AU 2003208609	A1	20030909	AU 2003-208609	20030221
JP 2003313600	A2	20031106	JP 2003-43942	20030221
EP 1476530	A1	20041117	EP 2003-707003	20030221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1639314	A	20050713	CN 2003-804438	20030221
US 2006058211	A1	20060316	US 2004-500859	20040719
PRIORITY APPLN. INFO.:			JP 2002-46122	A
			WO 2003-JP1940	W
				20030221

AB An antifouling detergent for hard surfaces, excellent in soil prevention without corroding metallic materials, comprises: a and a cationic surfactant (b), wherein the polymer (a) contains a monomer unit A having at least one group selected from amino groups and quaternary ammonium groups and a monomer unit B represented by -SO₂-, and the content of the monomer unit A in the whole monomer units is 10 to 99 mol-% and the molar ratio of the monomer unit B/the monomer unit A is from 0.01 to 1.

IT 64598-61-4
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)
 (detergent; polymeric antifouling
 detergent for hard surfaces)
 RN 64598-61-4 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with (2Z)-2-butenedioic acid and sulfur dioxide (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 7446-09-5
 CMF 02 S

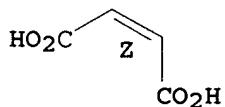


CM 2
 CRN 7398-69-8
 CMF C8 H16 N . Cl



CM 3
 CRN 110-16-7
 CMF C4 H4 O4

Double bond geometry as shown.



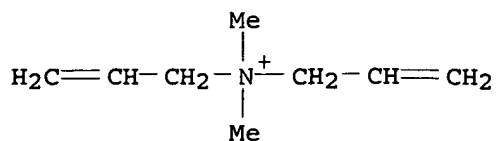
IT 26062-79-3, Merquat 100 26470-16-6
 53694-17-0, Merquat 280 126842-83-9,
 Diallyldimethylammonium chloride-maleic acid copolymer
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)
 (polymeric antifouling detergent for hard
 surfaces)
 RN 26062-79-3 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride,

homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl



● Cl⁻

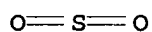
RN 26470-16-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with sulfur dioxide (9CI) (CA INDEX NAME)

CM 1

CRN 7446-09-5

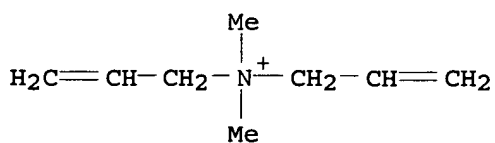
CMF O2 S



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl



● Cl⁻

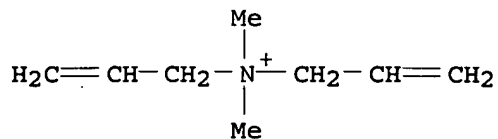
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

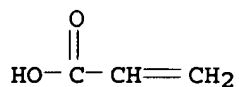
CMF C8 H16 N . Cl



CM 2

CRN 79-10-7

CMF C3 H4 O2



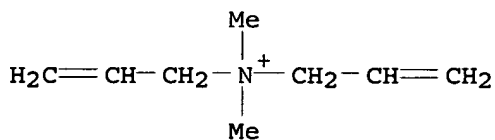
RN 126842-83-9 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with (2Z)-2-butenedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

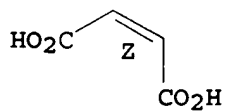


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



IC ICM C11D003-37

CC 46-3 (Surface Active Agents and Detergents)

MEI HUANG EIC1700 REM4B28 571-272-3952

07/17/2006

- IT Glycosides
RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(alkyl; polymeric **antifouling detergent** for hard surfaces)
- IT Quaternary ammonium compounds, uses
RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(benzylcoco alkyldimethyl, chlorides; polymeric **antifouling detergent** for hard surfaces)
- IT Surfactants
(cationic, polymeric; polymeric **antifouling detergent** for hard surfaces)
- IT Polyelectrolytes
(cationic, surfactant; polymeric **antifouling detergent** for hard surfaces)
- IT Detergents
(toilet bowl cleaners; polymeric **antifouling detergent** for hard surfaces)
- IT 64598-61-4
RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(**detergent**; polymeric **antifouling detergent** for hard surfaces)
- IT 121-54-0, Benzethonium chloride 959-55-7, Octyldimethylbenzylammonium chloride 1643-20-5, Dodecyldimethylamine oxide 4292-10-8, N-Lauroylaminopropyl-N,N-dimethyl-N-carboxymethyl ammonium betaine 7173-51-5, Didecyldimethylammonium chloride 26062-79-3, Merquat 100 26470-16-6 53694-17-0, Merquat 280 126842-83-9, Diallyldimethylammonium chloride-maleic acid copolymer
RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(polymeric **antifouling detergent** for hard surfaces)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:674004 HCAPLUS
DOCUMENT NUMBER: 139:216198
TITLE: Concentrated liquid cleaner for washing toilets
INVENTOR(S): Komatsu, Yosuke; Aihara, Noboru; Tsukuda, Kazunori
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2003238996	A2	20030827	JP 2002-46119	20020222

PRIORITY APPLN. INFO.:

JP 2002-46119

200202

22

AB The cleaner comprises (A) polymers derived from 10-100 mol% quaternary ammonium monomers and having wt.-av. mol. wt. 1000-6,000,000 2-35%, (B) quaternary ammonium antibacterial compds. having mol. wt. <1000 2-35%, (C) perfume components of geraniol and p-methylacetophenone, etc. 1-15%, and (D) water-sol. solvents of ethylene glycol and propylene glycol, etc. 5-60%. A compn. contained diallyldimethylammonium chloride-maleic acid-sulfur dioxide copolymer 5, Sanisol C 5, perfumes 2, ethylene glycol 15, alkyl glycoside 15, and water the balance.

IT 26062-79-3, Diallyldimethylammonium chloride homopolymer 64598-61-4, Diallyldimethylammonium chloride-maleic acid-sulfur dioxide copolymer 126842-83-9, Diallyldimethylammonium chloride-maleic acid copolymer

RL: TEM (Technical or engineered material use); USES (Uses) (concd. liq. cleaner for washing toilets)

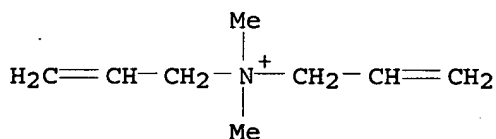
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

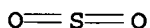
RN 64598-61-4 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with (2Z)-2-butenedioic acid and sulfur dioxide (9CI) (CA INDEX NAME)

CM 1

CRN 7446-09-5

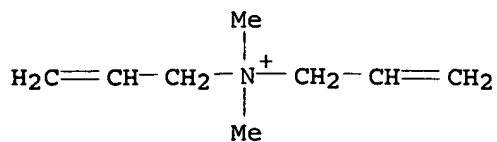
CMF O2 S



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

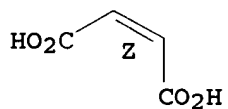


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



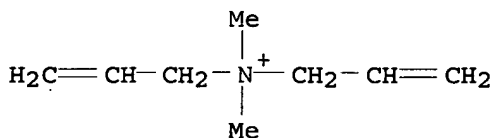
RN 126842-83-9 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with (2Z)-2-butenedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

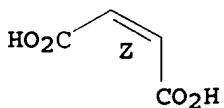


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



IC ICM C11D010-02
 ICS C11D001-62; C11D003-20; C11D003-37; C11D003-50; C11D017-00;
 C11D017-08
 CC 46-6 (Surface Active Agents and Detergents)
 IT **Detergents**
 (toilet bowl cleaners; concd. liq. cleaner for washing toilets)
 IT 26062-79-3, Diallyldimethylammonium chloride homopolymer
 64598-61-4, Diallyldimethylammonium chloride-maleic
 acid-sulfur dioxide copolymer 126842-83-9,
 Diallyldimethylammonium chloride-maleic acid copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (concd. liq. cleaner for washing toilets)

L35 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:674002 HCAPLUS

DOCUMENT NUMBER: 139:199119

TITLE: **Antisoiling detergents for**
 hard surface

INVENTOR(S): Aihara, Noboru; Komatsu, Yosuke; Tsukuda,
 Kazunori; Miyanaga, Seiichi; Shiba, Kenichi

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238991	A2	20030827	JP 2002-46121	20020222
WO 2003070866	A1	20030828	WO 2003-JP1939	20030221
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003208608	A1	20030909	AU 2003-208608	20030221
EP 1476529	A1	20041117	EP 2003-707002	20030221
EP 1476529	B1	20060111		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1639313	A	20050713	CN 2003-804434	

US 2005070456 A1 20050331 US 2004-500469 200302 21

PRIORITY APPLN. INFO.: JP 2002-46121 A 200407 15

WO 2003-JP1939 W 200202 22

200302 21

AB The **detergents** contain polymers having wt.-
 av. mol. wt. 1000-100,000 and consisting of 10-100
 mol% monomers with amino and/or quaternary ammonium groups. A
detergent contained 0.5 part diallyldimethylammonium
 chloride-maleic acid copolymer and 99.5 parts water, showing good
antisoiling effect for toilet surface.

IT 64598-61-4, Diallyldimethylammonium chloride-maleic
 acid-sulfur dioxide copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**antisoiling** anticorrosive **detergents** for
 hard surface)

RN 64598-61-4 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with (2Z)-2-butenedioic acid and sulfur dioxide (9CI) (CA INDEX
 NAME)

CM 1

CRN 7446-09-5

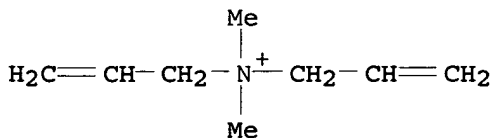
CMF O2 S

O=S=O

CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl



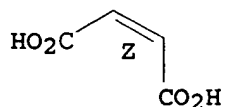
● Cl⁻

CM 3

CRN 110-16-7

CMF C4 H4 O4

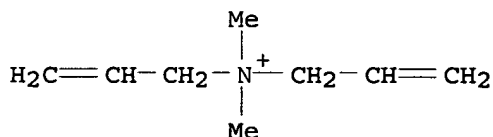
Double bond geometry as shown.



IT 126842-83-9, Diallyldimethylammonium chloride-maleic acid
copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling detergents** for hard surface)
RN 126842-83-9 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with (2Z)-2-butenedioic acid (9CI) (CA INDEX NAME)

CM 1

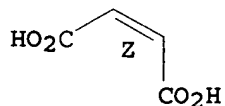
CRN 7398-69-8
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



IC ICM C11D003-37
CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 38
ST **antisoiling detergent** hard surface toilet;
diallyldimethylammonium chloride maleic acid copolymer
antisoiling detergent
IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers; **antisoiling detergents** for hard
surface)
IT **Detergents**

(toilet; **antisoiling detergents** for hard surface)

IT 64598-61-4, Diallyldimethylammonium chloride-maleic acid-sulfur dioxide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling anticorrosive detergents** for hard surface)

IT 126842-83-9, Diallyldimethylammonium chloride-maleic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling detergents** for hard surface)

L35 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:648251 HCAPLUS

DOCUMENT NUMBER: 139:182032

TITLE: All purpose liquid cleaning compositions containing positive charged surfactant-polymer complex

INVENTOR(S): Durbut, Patrick; Broze, Guy; Mathieu, Francoise

PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. 6,534,469.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 6608020	B1	20030819	US 2003-365659	20030213
US 6534469	B1	20030318	US 2002-236229	20020906
PRIORITY APPLN. INFO.:			US 2002-236229	A2 20020906

AB A hard surface microemulsion or all purpose cleaning compn. more environmentally friendly, which is esp. effective in the removal of oily or greasy soils, comprises: (a) about 0.1 to 20 wt% of a pos. charged complex comprising: (i) an alkali metal salt of a fluoroalkyl sulfonate anionic surfactant or an ammonium salt of a fluoroalkyl sulfonate surfactant or mixts. thereof; and (ii) a polycationic polymer being complexed with said anionic surfactant in a molar ratio of said anionic surfactant to the pos. charged binding sites available on the backbone of said polycationic polymer of about 0.95:1 to 0.05:1; and (b) the 60-97 wt% of water.

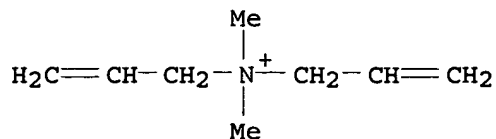
IT 26590-05-6, Merquat 550
RL: TEM (Technical or engineered material use); USES (Uses)
(Salcare Super 7; all purpose liq. cleaning compns. contg. pos. charged surfactant-polymer complex)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

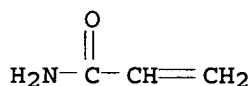
CRN 7398-69-8
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 79-06-1
CMF C3 H5 N O



IC ICM C11D017-00
INCL 510417000; 510426000; 510422000; 510480000; 510492000; 510432000;
510508000; 510512000
CC 46-6 (Surface Active Agents and Detergents)
ST liq detergent pos charged surfactant polymer complex
IT Detergents
(liq.; all purpose liq. cleaning compns. contg. pos. charged
surfactant-polymer complex)
IT 26590-05-6, Merquat 550
RL: TEM (Technical or engineered material use); USES (Uses)
(Salcare Super 7; all purpose liq. cleaning compns. contg. pos.
charged surfactant-polymer complex)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:622562 HCAPLUS
DOCUMENT NUMBER: 139:166236
TITLE: Environmentally-friendly all purpose liquid
cleaning compositions
INVENTOR(S): Durbut, Patrick; Broze, Guy; Mathieu, Francoise
PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA
SOURCE: U.S., 7 pp., Cont.-in-part of U.S. Ser. No:
236,160.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

 US 6605585 B1 20030812 US 2003-365661 200302
 13
 US 6534468 B1 20030318 US 2002-236160 200209
 06
 PRIORITY APPLN. INFO.: US 2002-236160 A2 200209
 06

AB Title cleaning or microemulsion compns., esp. effective in the removal of oily or greasy soils, contains a pos. charged surfactant-polymer complex, a hydrocarbon ingredient, a cosurfactant, and water. Thus, a compn. was prepd. by mixing sodium paraffin sulfonate 0.07, Merquat 550 (dimethyldiallylammonium chloride-acrylamide copolymer) 0.5, and water, showing grease release performance 28 Nbr. of gardner strokes, and soil removal 89%.

IT 26590-05-6, Merquat 550
 RL: TEM (Technical or engineered material use); USES (Uses)
 (prodn. of environmentally-friendly all purpose liq. cleaning compns.)

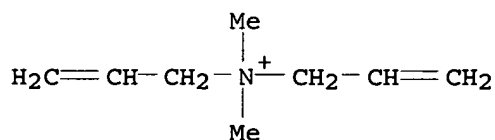
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

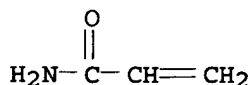


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D017-00

INCL 510417000; 510422000; 510426000; 510427000; 510432000; 510492000;
 510506000; 510508000; 510480000; 510512000

CC 46-6 (Surface Active Agents and Detergents)

IT **Detergents**
(cleaning compns.; prodn. of environmentally-friendly all purpose liq. cleaning compns.)

IT **Detergents**
(liq.; prodn. of environmentally-friendly all purpose liq. cleaning compns.)

IT 111-76-2, Glycol monobutyl ether 112-34-5, Diethylene glycol monobutyl ether 26590-05-6, Merquat 550 86674-95-5, Pentaethylene glycol monohexyl ether
RL: TEM (Technical or engineered material use); USES (Uses)
(prodn. of environmentally-friendly all purpose liq. cleaning compns.)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:258174 HCAPLUS
DOCUMENT NUMBER: 138:273347
TITLE: Sterilizing **soiling**-repellent **detergent** for hard surface
INVENTOR(S): Aihara, Noboru; Morii, Noriyuki; Tsukuda, Kazunori; Yamada, Hiroyuki
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003096493	A2	20030403	JP 2001-284939	20010919
PRIORITY APPLN. INFO.: JP 2001-284939				20010919

OTHER SOURCE(S): MARPAT 138:273347

AB The **detergent** comprises (a) polymers having mol. wt. 1000-6 x 106 and contg. 10-100 mol% monomers having quaternary ammonium or tertiary amino group, (b) disinfectant compds. having mol. wt. <1000 and quaternary ammonium group, and (c) surfactants, where when the surfactants are anionic, (c)/(b) ratio is less than 1. A compn. contained Merquat 100 0.1, Sanisol C 0.01, Amphitol 20N 1, C12- and C14-alkyl glucosides 1, EtOH 3, propylene glycol 3, citric acid 2, EDTA-4 Na 3, and water the balance, showing pH 7, good **detergency**, **soiling** repellency, and disinfection.

IT 26062-79-3, Merquat 100
RL: TEM (Technical or engineered material use); USES (Uses)
(Merquat 100; sterilizing **soiling**-repellent **detergent** for hard surface)

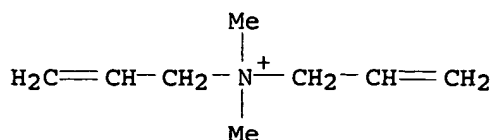
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IT 53694-17-0, Merquat 280

RL: TEM (Technical or engineered material use); USES (Uses)
 (Merquat 280; sterilizing **soiling**-repellent
detergent for hard surface)

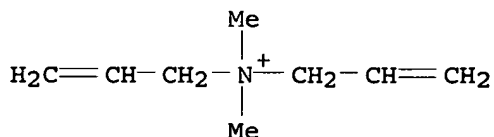
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

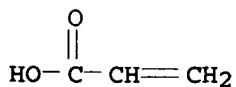
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IT 26590-05-6, Merquat 550

RL: TEM (Technical or engineered material use); USES (Uses)
 (Merquat 550; sterilizing **soiling**-repellent
detergent for hard surface)

RN 26590-05-6 HCAPLUS

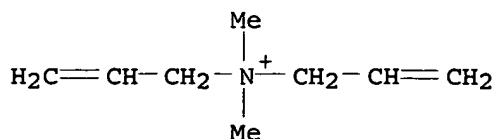
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer

with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

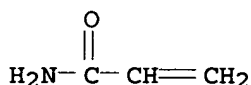


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D003-37
 ICS A01N025-02; A01N033-04; A01N033-10; B08B003-08; B08B017-02;
 C09K003-00; C11D001-62; C11D003-26
 CC 46-6 (Surface Active Agents and Detergents)
 ST sterilizing **soiling** repellent **detergent** hard
 surface; quaternary ammonium tertiary amino polymer disinfectant
detergent
 IT Glycosides
 RL: TEM (Technical or engineered material use); USES (Uses)
 (alkyl, C12- and C14-; sterilizing **soiling**-repellent
detergent for hard surface)
 IT Disinfectants
 (**detergent**; sterilizing **soiling**-repellent
detergent for hard surface)
 IT **Detergents**
 (disinfectant; sterilizing **soiling**-repellent
detergent for hard surface)
 IT Quaternary ammonium compounds, uses
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered
 material use); BIOL (Biological study); USES (Uses)
 (disinfectant; sterilizing **soiling**-repellent
detergent for hard surface)
 IT Antibacterial agents
 Surfactants
 (sterilizing **soiling**-repellent **detergent** for
 hard surface)
 IT Ionene polymers
 RL: TEM (Technical or engineered material use); USES (Uses)
 (sterilizing **soiling**-repellent **detergent** for

- hard surface)
- IT 1643-20-5, Amphitol 20N
RL: TEM (Technical or engineered material use); USES (Uses)
(Amphitol 20N; sterilizing **soiling-repellent detergent** for hard surface)
- IT 26062-79-3, Merquat 100
RL: TEM (Technical or engineered material use); USES (Uses)
(Merquat 100; sterilizing **soiling-repellent detergent** for hard surface)
- IT 53694-17-0, Merquat 280
RL: TEM (Technical or engineered material use); USES (Uses)
(Merquat 280; sterilizing **soiling-repellent detergent** for hard surface)
- IT 26590-05-6, Merquat 550
RL: TEM (Technical or engineered material use); USES (Uses)
(Merquat 550; sterilizing **soiling-repellent detergent** for hard surface)
- IT 7173-51-5, Didecyldimethylammonium chloride
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(Quartamin D 10P; sterilizing **soiling-repellent detergent** for hard surface)
- IT 122-18-9, Sanisol C
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(Sanisol C; sterilizing **soiling-repellent detergent** for hard surface)
- IT 121-54-0, Benzetonium chloride
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(sterilizing **soiling-repellent detergent** for hard surface)
- IT 503186-17-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sterilizing **soiling-repellent detergent** for hard surface)
- IT 4292-10-8, N-Lauroylaminopropyl-N,N-dimethyl-N-carboxymethylammonium betaine 9002-92-0, Polyoxyethylene lauryl ether
RL: TEM (Technical or engineered material use); USES (Uses)
(sterilizing **soiling-repellent detergent** for hard surface)

L35 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:217983 HCAPLUS
DOCUMENT NUMBER: 138:223314
TITLE: All purpose liquid cleaning compositions for removing oil and greasy soils
INVENTOR(S): Durbut, Patrick; Broze, Guy; Mathieu, Francoise
PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6534469 B1 20030318 US 2002-236229 200209
06
US 6608020 B1 20030819 US 2003-365659 200302
13
PRIORITY APPLN. INFO.: US 2002-236229 A2 200209
06

AB All purpose cleaning or microemulsion compns. more environmentally friendly, which is esp. effective in the removal of oily or greasy soils, contains a pos. charged surfactant-polymer complex, a hydrocarbon ingredient, a cosurfactant, and water. Thus, a compn. comprising sodium fluoroalkyl sulfonate 1.5, Merquat 550 0.5, and water 98 parts gave oleophobicity (corn oil droplets contact angle) 90.

IT 26590-05-6, Merquat 550
RL: TEM (Technical or engineered material use); USES (Uses)
(Salcare Super 7; all purpose liq. cleaning compns. for removing oil and greasy soils)

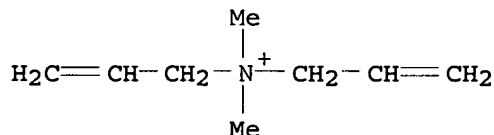
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

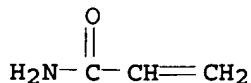


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D017-00

INCL 510417000; 510426000; 510422000; 510432000; 510492000; 510506000;
510508000; 510512000; 510480000

CC 46-5 (Surface Active Agents and Detergents)

IT Sulfonic acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(alkanesulfonic, sodium salts, fluoro; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT Degreasing agents
(all purpose liq. cleaning compns. for removing oil and greasy soils)

IT Surfactants
(anionic; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT Surfactants
(cationic; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT Carboxylic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(dicarboxylic; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT Detergents
(liq.; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT 26590-05-6, Merquat 550
RL: TEM (Technical or engineered material use); USES (Uses)
(Salcare Super 7; all purpose liq. cleaning compns. for removing oil and greasy soils)

IT 7664-38-2, Phosphoric acid, uses 10034-99-8, Magnesium sulfate heptahydrate 500717-70-4, CPCC 52
RL: TEM (Technical or engineered material use); USES (Uses)
(all purpose liq. cleaning compns. for removing oil and greasy soils)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:217982 HCAPLUS

DOCUMENT NUMBER: 138:206919

TITLE: Liquid cleaning compositions for removing oil or greasy soils

INVENTOR(S): Durbut, Patrick; Broze, Guy; Mathieu, Francoise

PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA

SOURCE: U.S., 8 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6534468	B1	20030318	US 2002-236160	20020906
US 6605585	B1	20030812	US 2003-365661	20030213
PRIORITY APPLN. INFO.:			US 2002-236160	A2 20020906

AB All purpose cleaning or microemulsion compns. more environmentally friendly, which is esp. effective in the removal of oily or greasy

soils contains a pos. charged surfactant-polymer complex, a hydrocarbon ingredient, a cosurfactant, and water.

IT 26590-05-6, Merquat 550

RL: TEM (Technical or engineered material use); USES (Uses)
(liq. cleaning compns.)

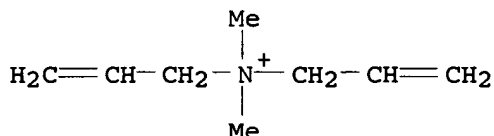
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

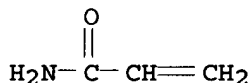


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D017-00

INCL 510417000; 510426000; 510427000; 510432000; 510492000; 510506000;
510508000; 510512000

CC 46-6 (Surface Active Agents and Detergents)

IT **Detergents**

(liq.; liq. cleaning compns.)

IT 7664-38-2, Phosphoric acid, uses 10034-99-8, Magnesium sulfate heptahydrate 26590-05-6, Merquat 550

RL: TEM (Technical or engineered material use); USES (Uses)
(liq. cleaning compns.)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:196942 HCAPLUS

DOCUMENT NUMBER: 138:206916

TITLE: Fluoroalkyl sulfonate-containing liquid
detergents

INVENTOR(S): Durbut, Patrick; Broze, Guy; Mathieu, Francoise

PATENT ASSIGNEE(S): Colgate-Palmolive Company, USA

SOURCE: U.S., 9 pp.

DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 English
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6531442	B1	20030311	US 2002-236098	20020906
PRIORITY APPLN. INFO.:			US 2002-236098	20020906

AB All purpose cleaning or microemulsion compns. more environmentally friendly, which is esp. effective in the removal of oily or greasy soils, contains 0.1-25 wt.% of a pos. charged surfactant-polymer complex, which is composed of alkali or ammonium salt of fluoroalkyl sulfonate anionic surfactants and polycationic polymers being complexed with the anionic surfactant in a molar ratio of 1:0.05-1:0.95, 0-50 wt.% of cosurfactant selected from water sol. glycol ether and C3-6 aliph. carboxylic acids, 0-10 wt.% of water insol. hydrocarbon or perfume, 0.1-25 wt.% of ethoxylated nonionic surfactant, water, and, optionally, salt of multivalent metal cation, such as MgO and MgSO₄, and C8-22 fatty acids. Thus, poly(acrylamide-diallyldimethylammonium chloride) (Merquat 550) 0.5 and fluoroalkyl sulfonate sodium salt 0.15 wt.% were dissolved in water to obtain liq. **detergent** with Oleophobicity of 91 degree and soil removal percentage of 95.

IT 26590-05-6, Merquat 550

RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoroalkyl sulfonate-contg. liq. **detergents**)

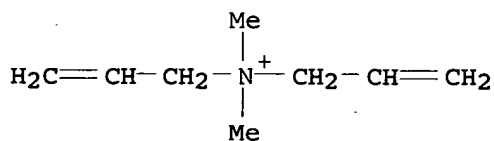
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

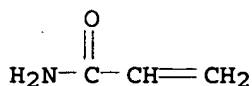


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D017-00
 INCL 510421000; 510424000; 510426000; 510427000; 510428000; 510505000;
 510508000
 CC 46-6 (Surface Active Agents and Detergents)
 ST fluoroalkyl sulfonate alkali ammonium salt cationic polymer liq
detergent; glycol ether aliph carboxylic acid cosurfactant
 liq **detergent**; hydrocarbon perfume ethoxylated nonionic
 surfactant magnesium oxide sulfate **detergent**;
 polyacrylamide diallyldimethyl ammonium chloride fluoroalkyl
 sulfonate sodium salt **detergent**
 IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (C8-22; fluoroalkyl sulfonate-contg. liq. **detergents**)
 IT Alcohols, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (C9-11, ethoxylated, Neodol 91 8, surfactant; fluoroalkyl
 sulfonate-contg. liq. **detergents**)
 IT Sulfonic acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (alkanesulfonic, perfluoro, salts, sodium salts; fluoroalkyl
 sulfonate-contg. liq. **detergents**)
 IT Surfactants
 (anionic, complexes with cations; fluoroalkyl sulfonate-contg.
 liq. **detergents**)
 IT Polyoxyalkylenes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (cosurfactant; fluoroalkyl sulfonate-contg. liq.
detergents)
 IT Glycols, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (ethers, cosurfactant; fluoroalkyl sulfonate-contg. liq.
detergents)
 IT Perfumes
 (fluoroalkyl sulfonate-contg. liq. **detergents**)
 IT Ethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (glycol, cosurfactant; fluoroalkyl sulfonate-contg. liq.
detergents)
 IT **Detergents**
 (liq.; fluoroalkyl sulfonate-contg. liq. **detergents**)
 IT Surfactants
 (nonionic, ethoxylated; fluoroalkyl sulfonate-contg. liq.
detergents)
 IT Hydrocarbons, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (water-insol.; fluoroalkyl sulfonate-contg. liq.
detergents)
 IT 79-09-4, Propionic acid, uses 79-10-7, Acrylic acid, uses
 110-15-6, Succinic acid, uses 110-94-1, Glutaric acid 111-76-2,
 Ethylene glycol monobutyl ether 112-34-5, Diethylene glycol
 monobutyl ether 143-22-6, Triethylene glycol monobutyl ether
 1320-67-8, Propylene glycol monomethyl ether 25322-69-4,
 Polypropylene glycol 25961-89-1, Triethylene glycol monohexyl

ether 29387-86-8, Propylene glycol monobutyl ether 34590-94-8,
 Dipropylene glycol monomethyl ether 35884-42-5, Dipropylene glycol
 monobutyl ether 39619-69-7, Tetraethylene glycol monohexyl ether
 55934-93-5, Tripropylene glycol monobutyl ether 80763-10-6,
 Propylene glycol tert-butyl ether 86674-95-5, Pentaethylene glycol
 monohexyl ether

RL: TEM (Technical or engineered material use); USES (Uses)
 (cosurfactant; fluoroalkyl sulfonate-contg. liq. **detergents**)

IT 683-10-3D, Lauryl betaine, alkyl dimethyl derivs. 1309-48-4,
 Magnesium oxide, uses 2235-54-3, Ammonium lauryl sulfate
 7487-88-9, Magnesium sulfate, uses 26590-05-6, Merquat 550
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoroalkyl sulfonate-contg. liq. **detergents**)

IT 272113-23-2, Plurafac LF 300
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactant; fluoroalkyl sulfonate-contg. liq. **detergents**)
)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN
 THE RE FORMAT

L35 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:961425 HCAPLUS
 DOCUMENT NUMBER: 138:26132
 TITLE: Procedure for the **antisoiling**
treatment of textile and nontextile materials
 INVENTOR(S): Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati
 PATENT ASSIGNEE(S): BASF AG, Germany
 SOURCE: Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10128900	A1	20021219	DE 2001-10128900	20010615
WO 2002103106	A1	20021227	WO 2002-EP6511	20020613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1402104	A1	20040331	EP 2002-780767	20020613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

US 2004250354

A1

20041216

US 2003-480823

200312
15

PRIORITY APPLN. INFO.:

DE 2001-10128900

A

200106
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WO 2002-EP6511

W

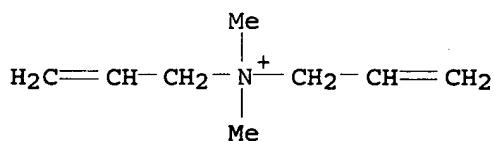
200206
13

- AB Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on polymers based on (A) 60-100% ≥ 1 carboxyl group-contg., ethylenically unsatd. monomer or their salts, (B) 0-40% ≥ 1 water-insol. monoethylenically unsatd. monomer, (C) 0-25% ≥ 1 monomer having sulfonic acid and/or phosphonic acid groups or their salts, (D) 0-30% ≥ 1 water-sol. nonionic monomer and contg. anionic, nonionic and(or) betaine emulsifiers or protective colloids, with the surface of the particles being modified by ≥ 1 cationic polymer, ≥ 1 multivalent metal ion, and(or) ≥ 1 cationic surfactant. A typical dispersion for spraying laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:55:77.5 acrylic acid-Et acrylate-methacrylic acid copolymer dispersion with particle size 254 nm and contg. oxidized starch emulsifier with 2000 ppm water of pH 4 and adding an equiv. amt. of a soln. contg. 200 ppm polyethylenimine (mol. wt. 1,000,000) in pH-4 water.
- IT 26062-79-3, Polydiallyldimethylammonium chloride
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- RN 26062-79-3 HCAPLUS
- CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IC ICM D06B009-04

ICS C11D003-37

CC 46-5 (Surface Active Agents and Detergents)

ST antisoiling agent fabric cationic modified acrylic acid
copolymer nanoparticle; oxidized starch emulsifier cationic acrylic

- nanoparticle **antisoiling** agent fabric; polyethylenimine modified acrylic polymer nanoparticle **antisoiling** agent fabric; ethyl acrylate copolymer cationic modified nanoparticle **antisoiling** agent fabric; methacrylic acid copolymer cationic modified nanoparticle **antisoiling** agent fabric
- IT Emulsifying agents
(anionic; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Laundering
Nanoparticles
(**antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT Polyamines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT Surfactants
(cationic, cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT Betaines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifiers; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Detergents
(laundry; laundry **detergents** contg. **antisoiling** agents based on cationically modified acrylic polymer nanoparticles)
- IT Emulsifying agents
(nonionic; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Colloids
(protective; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT 30351-73-6P, Acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3, Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine 10043-52-4, Calcium chloride, uses 26062-79-3, Polydiallyldimethylammonium chloride
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT 9005-25-8D, Starch, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(emulsifier; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

L35 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:961424 HCAPLUS
 DOCUMENT NUMBER: 138:26131
 TITLE: Procedure for the **antisoiling** treatment of textile and nontextile materials
 INVENTOR(S): Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati
 PATENT ASSIGNEE(S): BASF AG, Germany
 SOURCE: Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10128894	A1	20021219	DE 2001-10128894	20010615
CA 2450264	AA	20021227	CA 2002-2450264	20020614
WO 2002103105	A2	20021227	WO 2002-EP6628	20020614
WO 2002103105	A3	20030501		
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
EP 1402106	A2	20040331	EP 2002-760183	20020614
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR	
BR 2002010362	A	20040810	BR 2002-10362	20020614
JP 2004534157	T2	20041111	JP 2003-505409	20020614
US 2004171515	A1	20040902	US 2003-479983	20031215
US 7074750	B2	20060711		
PRIORITY APPLN. INFO.:			DE 2001-10128894	20010615

WO 2002-EP6628

W

200206

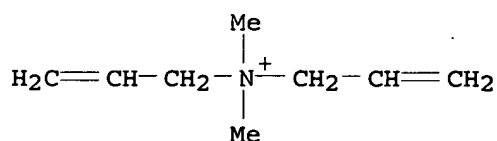
14

- AB Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on crosslinked polymers based on (A) 60-99.99% ≥ 1 carboxyl group-contg., ethylenically unsatd. monomers or their salts, (B) 0-40% ≥ 1 water-insol. monoethylenically unsatd. monomer, (C) 0.01-30% ≥ 1 monomer having >1 ethylenically unsatd. groups, (D) 0-25% ≥ 1 monomers having sulfonic acid and/or phosphonic acid groups or their salts, (E) 0-30% ≥ 1 water-sol. nonionic monomer and contg. anionic, nonionic and(or) betaine emulsifiers or protective colloids, with the surface of the particles being modified by ≥ 1 cationic polymer, ≥ 1 multivalent metal ion, and(or) ≥ 1 cationic surfactant. A typical dispersion for spraying laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:2.1:3.1:132 acrylic acid-allyl methacrylate-Et acrylate-methacrylic acid copolymer dispersion with particle size 134 nm and contg. oxidized starch emulsifier with 2000 ppm water of pH 4 and adding an equiv. amt. of a soln. contg. 200 ppm polyethylenimine (mol. wt. 1,000,000) in pH-4 water.
- IT 26062-79-3, Polydiallyldimethylammonium chloride
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- RN 26062-79-3 HCAPLUS
- CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

- IC ICM D06L001-12
- CC 46-5 (Surface Active Agents and Detergents)
 Section cross-reference(s): 40
- ST **antisoiling** agent fabric cationic modified acrylic acid copolymer nanoparticle; oxidized starch emulsifier cationic acrylic nanoparticle **antisoiling** agent fabric; polyethylenimine modified acrylic polymer nanoparticle **antisoiling** agent fabric; ethyl acrylate copolymer cationic modified nanoparticle **antisoiling** agent fabric; methacrylic acid copolymer cationic modified nanoparticle **antisoiling** agent fabric; allyl methacrylate copolymer cationic modified nanoparticle

- IT **antisoiling agent fabric**
- IT **Emulsifying agents**
(anionic; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT **Laundrying**
- IT **Nanoparticles**
(**antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT **Polyamines**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT **Surfactants**
(cationic, cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT **Betaines**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifiers; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT **Detergents**
(laundry; laundry **detergents** contg. **antisoiling** agents based on cationically modified acrylic polymer nanoparticles)
- IT **Emulsifying agents**
(nonionic; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT **Colloids**
(protective; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)
- IT 478296-43-4P, Acrylic acid-allyl methacrylate-ethyl acrylate-methacrylic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3, Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine 10043-52-4, Calcium chloride, uses 26062-79-3, Polydiallyldimethylammonium chloride
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; **antisoiling** treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)
- IT 9005-25-8D, Starch, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifier; in dispersions for **antisoiling** treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

L35 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:813890 HCAPLUS
 DOCUMENT NUMBER: 137:329268
 TITLE: Cosmetic compositions containing dispersion
 polymers
 INVENTOR(S): Brandt, Lorelei; Betts, Douglas E.; Johnson,
 Cathy C.
 PATENT ASSIGNEE(S): Ondeo Nalco Company, USA
 SOURCE: PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083085	A1	20021024	WO 2002-US9215	200203 26
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003059382	A1	20030327	US 2001-834128	200104 12
US 6696067	B2	20040224		
CA 2443213	AA	20021024	CA 2002-2443213	200203 26
EP 1383462	A1	20040128	EP 2002-713898	200203 26
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1512867	A	20040714	CN 2002-811279	200203 26
JP 2004528323	T2	20040916	JP 2002-580890	200203 26
BR 2002008857	A	20041019	BR 2002-8857	200203 26
PRIORITY APPLN. INFO.:				200203 26
			US 2001-834128	A
				200104 12
			WO 2002-US9215	W
				200203 26

AB A cosmetic dispersion compn. for treating hair, skin and nails comprises 0.001-25% by wt. (based on polymer solids) of a stable dispersion in an aq. salt soln. of a cationic, anionic or nonionic polymer having a wt. av. mol. wt. of 10,000-50,000,000. Thus, a shampoo contained acrylamide-dimethyaminoethylacrylate copolymer salt with benzyl chloride 1.50, Geropon SBFA-30 3.00, Standapol A 30.00, Plantaren-818UP 3.00, Glucamate DOE-120 2.10, Velvetex AB45 8.00, Nipagin 0.20, Nipasol 0.10, fragrance 0.10, Tween-20 2.00, fragrance 0.186, 50% citric acid 0.15, and water qs to 100%.

IT 26590-05-6, Acrylamide-Diallyldimethylammonium chloride copolymer
 RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES (Uses)
 (cosmetic compns. contg. dispersion polymers)

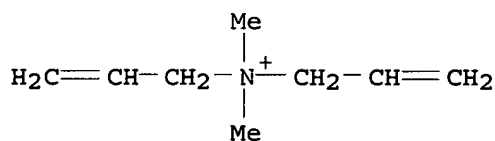
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

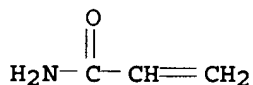


● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM A61K006-00
 ICS A61K007-00; A61K007-04; A61K007-06

CC 62-4 (Essential Oils and Cosmetics)

IT **Detergents**
 (dishwashing, liq.; cosmetic compns. contg. dispersion polymers)

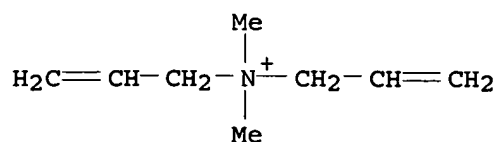
IT 9003-06-9, Acrylic acid-Acrylamide copolymer 26590-05-6,
 Acrylamide-Diallyldimethylammonium chloride copolymer 69418-26-4
 74153-51-8 108388-79-0
 RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES (Uses)
 (cosmetic compns. contg. dispersion polymers)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:707396 HCAPLUS
DOCUMENT NUMBER: 137:249530
TITLE: **Antifouling** cleaning composition for
regenerator fins with excellent rust prevention
and abrasion resistance
INVENTOR(S): Morii, Noriyuki; Inoue, Takumi; Tsukuda,
Kazunori; Komatsu, Yosuke
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002265926	A2	20020918	JP 2001-73351	200103 15
PRIORITY APPLN. INFO.: JP 2001-73351				200103 15

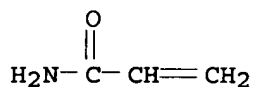
OTHER SOURCE(S): MARPAT 137:249530
AB Title compn. contains a polymer having av. wt. mol. wt. of
1,000-6,000,000, derived from a polymerizable unsatd. compd. contg.
at least 1 of quaternary ammonium groups or tertiary amino groups.
Thus, a compn. was prepd. by mixing Merquat 280 (acrylic
acid-dimethyldiallylammonium chloride copolymer) 0.1, alkyl
glucosides 6, di-Me benzylammonium chloride (antibacterial agent)
0.1 part, other ingredients, and water. The compn. demonstrated
excellent **antifouling** property, **detergency**,
abrasion resistance to plastics, and anticorrosion to aluminum.
IT 26590-05-6, Merquat 550 53694-17-0, Merquat 280
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical
or engineered material use); USES (Uses)
(prepn. of anticorrosive stain-proofing cleaning compn. for
regenerator fins)
RN 26590-05-6 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenamide (9CI) (CA INDEX NAME)
CM 1
CRN 7398-69-8
CMF C8 H16 N . Cl



CM 2

CRN 79-06-1

CMF C3 H5 N O



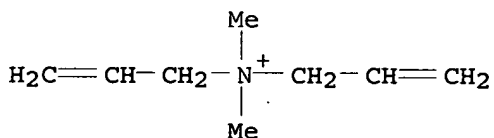
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

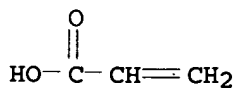
CMF C8 H16 N . Cl



CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09K003-00

ICS A01N033-12; C09D005-16; C09D131-02; C09D133-14; C09D133-24;
C09D157-12; F28F019-04; C08F018-02; C08F020-10; C08F020-56;

C08F026-02

CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 42
ST antifouling cleaning compn regenerator fin amine oxide
IT Coating materials
(antifouling; prepn. of anticorrosive stain-proofing
cleaning compn. for regenerator fins)
IT Antibacterial agents
Antifouling agents
Detergents
Surfactants
(prepn. of anticorrosive stain-proofing cleaning compn. for
regenerator fins)
IT 26590-05-6, Merquat 550 53694-17-0, Merquat 280
58627-30-8, Acrylamide-[3-(methacrylamido)propyltrimethylammonium
chloride copolymer
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical
or engineered material use); USES (Uses)
(prepn. of anticorrosive stain-proofing cleaning compn. for
regenerator fins)

L35 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:423047 HCAPLUS
DOCUMENT NUMBER: 137:7818
TITLE: Bleaching detergent compositions with
good antisoling and antifungal properties
INVENTOR(S): Sano, Hiroshi; Yamada, Hiroyuki; Tsukuda,
Kazunori; Ogura, Nobuyuki
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

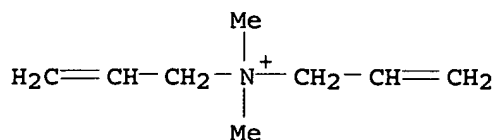
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002161298	A2	20020604	JP 2000-358952	200011 27
PRIORITY APPLN. INFO.:				200011 27

AB The compns. contain polymers having monomer units bearing quaternary
ammonium groups or tertiary amino groups and bleaching agents.
Thus, a bleaching compn. contained Marquat 280
(diallyldimethylammonium chloride-acrylic acid copolymer) 1, sodium
hypochlorite 3, polyethylene glycol alkyl ether sulfonate sodium
salt 0.5 part.
IT 26062-79-3, Merquat 100 53694-17-0, Merquat 280
RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); USES (Uses)
(fungicides; bleaching detergent compns. with good
antisoling and antifungal properties)
RN 26062-79-3 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride,
homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

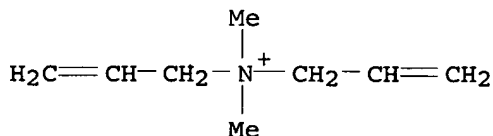
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

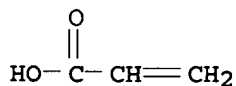
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C11D007-22

ICS C11D007-54

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 5

ST bleaching **detergent** diallyldimethylammonium chloride
acrylic acid copolymer; fungicide quaternary ammonium salt bleaching
detergent; **antisoiling** bleaching **detergent**
tertiary amine fungicide

IT Fungicides

(bleaching **detergent** compns. with good antisoling and antifungal properties)

IT **Detergents**

(bleaching; bleaching **detergent** compns. with good antisoling and antifungal properties)

IT Quaternary ammonium compounds, uses

RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(polymeric, fungicides; bleaching **detergent** compns. with good antisoling and antifungal properties)

IT Amines, uses

RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(tertiary, polymeric, fungicides; bleaching **detergent** compns. with good antisoling and antifungal properties)

IT 26062-79-3, Merquat 100 53694-17-0, Merquat 280

RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(fungicides; bleaching **detergent** compns. with good antisoling and antifungal properties)

L35 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:268797 HCAPLUS

DOCUMENT NUMBER: 136:296577

TITLE: Ammonium salt polymer composition for fabric softener

INVENTOR(S): Shirato, Kazutaka; Ogura, Nobuyuki; Tagata, Shuji

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002105857	A2	20020410	JP 2000-297922	20000929
PRIORITY APPLN. INFO.:				20000929

AB The compn. comprises polymer having wt.-av.

mol.-wt. 100,000-6,000,000 from a compd. of
R1R2C:CR3XN+R5R6R7Y.hivin. and/or R1R2C:CR3XNR6R7 (R1-3 = H, OH, C1-3 alkyl; X = C1-12 alkylene, COOR8, CONHR8, OCOR8, R9OCOR8; R5 = C1-3 alkyl, hydroxyalkyl, R1R2C:CR3X; R6, R7 = C 1-3 alkyl, hydroxyalkyl; R8, R9 = C1-5 alkylene; Y.hivin. = anionic group) and an aq. insol. quaternary ammonium salt and/or a tert-amine (salt) having ≥1 C14-36 alkyl or alkenyl group in a mol. Thus, a compn. was made from a copolymer of N,N-dimethylaminopropylmethacrylamide, acrylamide and acrylic acid; RCOOC2H4N(RCONHC3H6)Me; RCONHC3H6N(HOC2H4)Me (R = C15 alkyl and C17 alkyl mixt.); and an ethoxylated C12 satd. alc. adduct.

IT 53694-17-0, Acrylic acid-diallyldimethylammonium chloride copolymer

RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)

(ammonium salt polymer compn. for fabric softener)

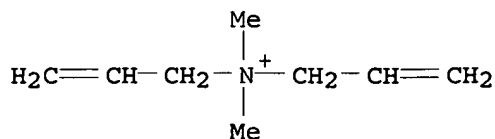
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

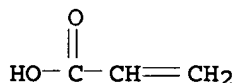


● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM D06M013-463

CC 46-5 (Surface Active Agents and Detergents)

ST fabric softener quaternary ammonium compd polymer; amine salt
laundry softener; alc adduct laundry **detergent** softener

IT 57-11-4, Stearic acid, uses 555-43-1, Stearic acid triglyceride
1323-83-7, Stearic acid diglyceride 31566-31-1, Stearic acid
monoglyceride 31587-78-7, Ethoxylated diethanolamine lauramide
38402-02-7D, derivs. 41999-70-6D, derivs. **53694-17-0**,
Acrylic acid-diallyldimethylammonium chloride copolymer 84647-37-0

RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)

(ammonium salt polymer compn. for fabric softener)

L35 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:148899 HCAPLUS

DOCUMENT NUMBER: 136:185821

TITLE: Antimicrobial cleaning composition with good
soiling resistance for hard surface

INVENTOR(S): Aihara, Shin; Morii, Noriyuki; Tsukuda, Kazunori

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060786	A2	20020226	JP 2000-252284	20000823
WO 2002016536	A1	20020228	WO 2001-JP6869	20010809

W: CN, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE, TR

PRIORITY APPLN. INFO.:

JP 2000-252284

A

20000823

OTHER SOURCE(S): MARPAT 136:185821

AB Title **detergent** compn., for cleaning and treating hard surfaces of such as toiletries, bathrooms, and kitchen tables, comprises (A) polymers of wt. av. mol. wt. 1,000-6,000,000, prepd. from (I) quaternary ammonium-contg. monomers and (II) other monomers [I/(I + II) = 10-100 mol%], and (B) antimicrobial quaternary ammonium compds. having mol. wt. ≤1000. Thus, a compn. was prepd. from acrylic amide-diallyldimethylammonium chloride copolymer Merquat-550 0.3, cocoalkyldimethylbenzylammonium chloride Sanisol C 0.3 part, and water.

IT 26062-79-3, Merquat-100 26590-05-6, Merquat-550
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (as antimicrobial agent for **detergent** compn. with good soiling resistance for hard surface)

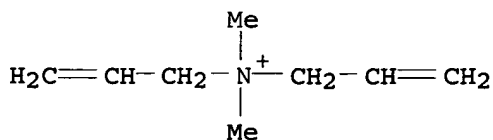
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

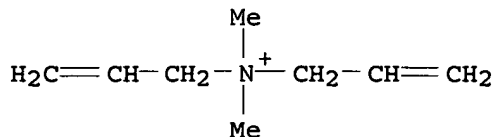
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

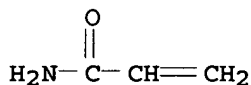
CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D003-37

ICS C11D001-62; C11D003-48

CC 46-6 (Surface Active Agents and Detergents)

ST quaternary ammonium polymer antimicrobial **detergent** hard surface; diallyldimethylammonium chloride copolymer cocoalkyldimethylbenzylammonium **detergent** hard surface

IT Glycosides

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(alkyl; as surfactant for **detergent** compn. with good **soiling** resistance for hard surface)

IT Quaternary ammonium compounds, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(as antimicrobial agent for **detergent** compn. with good **soiling** resistance for hard surface)

IT Antibacterial agents

(based on quaternary ammonium compd. for **detergent** compn. with good **soiling** resistance for hard surface)

IT Quaternary ammonium compounds, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(benzylcoco alkyldimethyl, chlorides; as antimicrobial agent for **detergent** compn. with good **soiling** resistance for hard surface)

IT Surfactants

(in **detergent** compn. with good **soiling** resistance for hard surface)IT **Detergents**

(toilet bowl cleaners; based on surfactant and antimicrobial quaternary ammonium compd.)

IT **Detergents**
 (with good **soiling** resistance for hard surface)

IT 26062-79-3, Merquat-100 26590-05-6, Merquat-550
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (as antimicrobial agent for **detergent** compn. with good **soiling** resistance for hard surface)

IT 121-54-0, Benzethonium chloride 122-18-9, Sanisol C 7173-51-5, Quartamin D 10P
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (as antimicrobial agent for **detergent** compn. with good **soiling** resistance for hard surface)

IT 26183-44-8, Polyethylene glycol lauryl ether sulfate
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (as surfactant for **detergent** compn. with good **soiling** resistance for hard surface)

IT 1643-20-5, Amphitol 20N 131836-82-3
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (as surfactant for **detergent** compn. with good **soiling** resistance for hard surface)

IT 57-55-6, Propylene glycol, uses 64-17-5, Ethanol, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (in **detergent** compn. with good **soiling** resistance for hard surface)

IT 64-02-8, Tetrasodium ethylenediaminetetraacetate 77-92-9, Citric acid, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in **detergent** compn. with good **soiling** resistance for hard surface)

L35 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:148897 HCAPLUS
 DOCUMENT NUMBER: 136:185820
 TITLE: Cleaning composition with good **soiling** resistance for hard surface
 INVENTOR(S): Aihara, Noboru; Morii, Noriyuki; Tsukuda, Kazunori
 PATENT ASSIGNEE(S): Kao Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002060784	A2	20020226	JP 2000-252285	20000823
JP 3422978	B2	20030707		
PRIORITY APPLN. INFO.:			JP 2000-252285	20000823

AB Title cleaning compn., having pH 1.5-12 at 20° for cleaning

and treating a hard surface, comprises (A) surfactants and (B) polymers prep'd. from (I) quaternary ammonium-contg. monomers and (II) other monomers contg. ≥ 1 selected from carboxylic and sulfonic acid group (I + II 5-100 mol% of the polymer). Thus, a compn. was prep'd. from acrylic acid-diallyldimethylammonium chloride copolymer Merquat-280 0.3, octyldimethylbenzylammonium chloride 1, N-lauroylaminopropyl-N,N-dimethyl-N-carboxymethylammonium betaine 1, decyl glucopyranoside 1, citric acid 2, tetrasodium ethylenediaminetetraacetate 2, ethanol 5 parts, and water.

IT 53694-17-0, Merquat 280

RL: PRP (Properties); TEM (Technical or engineered material use);

USES (Uses)

(in prodn. of cleaning compn. with good soiling resistance for hard surface)

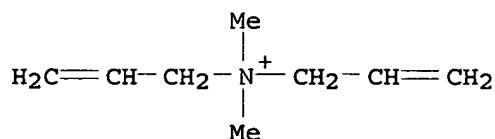
RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

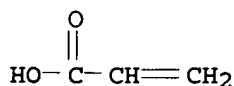


● Cl⁻

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C11D003-37

CC 46-6 (Surface Active Agents and Detergents)

ST quaternary ammonium polymer surfactant **detergent** hard surface **soiling** resistance; acrylic acid diallyldimethylammonium chloride copolymer **detergent** hard surface

IT Surfactants

(cationic; in prodn. of cleaning compn. with good soiling resistance for hard surface)

IT Surfactants

(in prodn. of cleaning compn. with good soiling resistance for hard surface)

IT Quaternary ammonium compounds, uses

RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)

(in prodn. of cleaning compn. with good soiling
resistance for hard surface)

IT **Detergents**

(with good soiling resistance for hard surface)

IT 959-55-7, Octyldimethylbenzylammonium chloride 58846-77-8
131836-82-3

RL: TEM (Technical or engineered material use); USES (Uses)
(as surfactant in cleaning compn. with good soiling
resistance for hard surface)

IT 57-55-6, Propylene glycol, uses 64-17-5, Ethanol, uses

RL: NUU (Other use, unclassified); USES (Uses)
(in cleaning compn. with good soiling resistance for
hard surface)

IT 64-02-8, Tetrasodium ethylenediaminetetraacetate 77-92-9, Citric
acid, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(in cleaning compn. with good soiling resistance for
hard surface)

IT 53694-17-0, Merquat 280

RL: PRP (Properties); TEM (Technical or engineered material use);
USES (Uses)
(in prodn. of cleaning compn. with good soiling
resistance for hard surface)

L35 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:760070 HCAPLUS

DOCUMENT NUMBER: 135:305513

TITLE: Laundry cleaning compositions containing a
cationic polymer with quaternary ammonium salts
as **detergency** enhancing surfactants

INVENTOR(S): Creeth, Andrew Martin; Van Der Hoeven, Philippus
Cornelis; Staples, Edwin John

PATENT ASSIGNEE(S): Unilever P.L.C., UK; Unilever N.V.

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1146110	A2	20011017	EP 2001-303102	200103 30
EP 1146110	A3	20020626		
EP 1146110	B1	20051123		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 310795	E	20051215	AT 2001-303102	200103 30
ES 2252157	T3	20060516	ES 2001-1303102	200103 30
PRIORITY APPLN. INFO.:			GB 2000-9059	A 200004

12

AB The compns. contains 0.05-5% cationic **detergency** enhancing polymer used to improve removal of oily and/or greasy soil from cotton fabrics, e.g., dimethyldiallyl ammonium chloride polymer, and also anionic or/and nonionic surfactants.

IT 26062-79-3, Diallyldimethylammonium chloride homopolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (a cationic polymer with quaternary ammonium salts as **detergency** enhancing surfactants for laundry cleaning compns.)

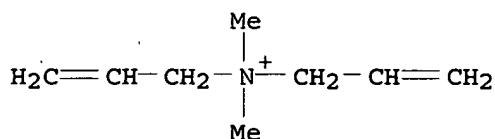
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IC ICM C11D003-37
 ICS C11D001-02; C11D001-83

CC 46-5 (Surface Active Agents and Detergents)

ST diallyldimethylammonium chloride cationic polymer **detergency** enhancing surfactant; quaternary ammonium salt contg polymer laundry cleaning compn

IT Surfactants
 (cationic; a cationic polymer with quaternary ammonium salts as **detergency** enhancing surfactants for laundry cleaning compns.)

IT **Detergency**
 (enhancing using a cationic polymer with quaternary ammonium salts for laundry cleaning compns.)

IT **Detergents**
 (laundry; contg. a cationic polymer with quaternary ammonium salts as **detergency** enhancing surfactants)

IT Polyoxyalkylenes, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (nonionic surfactant; laundry cleaning compns. having **detergency** enhancing surfactants)

IT Quaternary ammonium compounds, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (polymers; a cationic polymer with quaternary ammonium salts as **detergency** enhancing surfactants for laundry cleaning compns.)

- IT 26062-79-3, Diallyldimethylammonium chloride homopolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (a cationic polymer with quaternary ammonium salts as **detergency** enhancing surfactants for laundry cleaning compns.)
- IT 98-11-3D, Sodium benzenesulfonate, alkyl derivs., sodium salt
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (anionic surfactant; laundry cleaning compns. having **detergency** enhancing surfactants)
- IT 25322-68-3, Ethylene oxide homopolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (nonionic surfactant; laundry cleaning compns. having **detergency** enhancing surfactants)

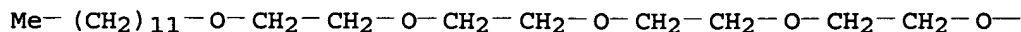
L35 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:277723 HCAPLUS
 DOCUMENT NUMBER: 132:295410
 TITLE: Polymer compositions and a method of promoting soil release from fabrics using said polymer compositions
 INVENTOR(S): Shulman, Jan Edward; Kirk, Thomas Cleveland; Swift, Graham; Schwartz, Curtis; Creamer, Marianne Patricia; Falcone, Beth Anne
 PATENT ASSIGNEE(S): Rohm and Haas Company, USA
 SOURCE: Eur. Pat. Appl., 16 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

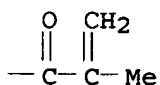
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 995791	A1	20000426	EP 1999-308001	19991011
EP 995791	B1	20040218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AU 9953555	A1	20000504	AU 1999-53555	19991008
ZA 9906411	A	20000412	ZA 1999-6411	19991011
CA 2285863	AA	20000422	CA 1999-2285863	19991013
KR 2000029231	A	20000525	KR 1999-45809	19991021
MX 9909687	A	20000531	MX 1999-9687	19991021
BR 9905106	A	20000815	BR 1999-5106	199910

CN 1252409 A 20000510 CN 1999-123313 21
 199910
 22
 JP 2000143738 A2 20000526 JP 1999-301272 199910
 22
 US 2001036912 A1 20011101 US 2001-878445 200106
 11
 US 6451756 B2 20020917 199810
 PRIORITY APPLN. INFO.: US 1998-105176P P 22
 US 1999-400630 A3 199909
 20
 AB Hydrophobically modified polycarboxylate polymers of SAmBnCpT [A =
 residue of monounsaturated carboxylic acid; B = residue of (alkoxylated)
 acrylate; C = residue of copolymerizable monomer; S and T are end
 groups; m = 0-500; n > 0; p = 0-500; m + p > 0] are useful for
 promoting soil release from fabrics, particularly cotton
 and cotton-contg. fabrics. An additive was prepd. from acrylic acid
 and tetraethylene glycol lauryl ether methacrylate.
 IT 264874-55-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (soil release additive; polymer compns. and a method of
 promoting soil release from fabrics)
 RN 264874-55-7 HCAPLUS
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer
 with 2-propenoic acid and 3,6,9,12-tetraoxatetracos-1-yl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 264874-53-5
 CMF C24 H46 O6

PAGE 1-A



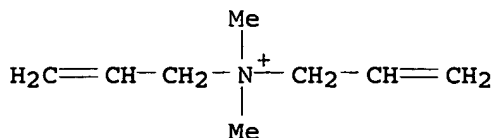
PAGE 1-B



CM 2

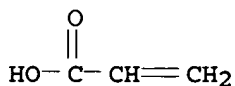
CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM C11D003-37
ICS C11D003-00
CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 40
ST **soil** release additive laundry **detergent**;
hydrophobic polycarboxylate polymer **soil** release additive
IT **Detergents**
(**antisoiling**; polymer compns. and a method of promoting
soil release from fabrics)
IT Fabric softeners
(polymer compns. and a method of promoting **soil** release
from fabrics)
IT 28062-60-4P, Acrylic acid-lauryl methacrylate copolymer
97105-16-3P 264874-54-6P 264874-55-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(**soil** release additive; polymer compns. and a method of
promoting **soil** release from fabrics)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:162603 HCAPLUS
DOCUMENT NUMBER: 133:121009
TITLE: Polyelectrolyte-surfactant complexes with
fluorinated surfactants: a new type of material
for coatings
AUTHOR(S): Lochhaas, K. H.; Thunemann, A. F.; Antonietti,
M.
CORPORATE SOURCE: Max-Planck Institute of Colloids and Interfaces,
Golm, D-14476, Germany
SOURCE: Surface Coatings International (1999), 82(9),
451-455

CODEN: SCOIE6; ISSN: 1356-0751

PUBLISHER: Oil and Colour Chemists' Association

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Four polyelectrolyte-surfactant complexes with com. surfactants: Fluowet SB, Zonyl FSA, FSE, and FSP and poly(diallyldimethylammonium chloride) were prepd. and evaluated as dispersants in coating formulations. The complexes have a lamellar structure and mostly planar interfaces, except the Zonyl FSE complex, for which has an addnl. regular structure element assumed to be hexagonally arranged perforations in the lamellae. The complexes provide repellency of polar and non-polar substances, low surface energy, good thermal and mech. stability, and ease of processing into thin films. Coatings formulated with the complexes can provide protection of building structures and machinery from fouling or environmental contamination and can be used for self-lubrication of machine parts. A perforated lamellar structure, such as that of the Zonyl FSE complex can be used to enrich O₂ from air for biomedical purposes.

IT 26062-79-3D, Poly(diallyldimethylammonium chloride), complexes with fluorinated anionic surfactants

RL: PRP (Properties)

(structure and stability of polyelectrolyte-fluorinated surfactant complexes for antifouling and soil resistant coatings)

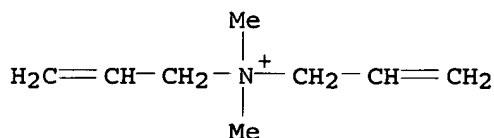
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

CC 37-5 (Plastics Manufacture and Processing)

Section cross-reference(s): 42, 46

ST polyelectrolyte surfactant complex lamellar structure

hydrophobicity; antifouling coating polyelectrolyte

surfactant complex; soil repellency

diallyldimethylammonium chloride polyelectrolyte surfactant complex

IT Surfactants

(anionic; structure and stability of polyelectrolyte-fluorinated surfactant complexes for antifouling and soil resistant coatings)

IT Coating materials

(antifouling; structure and stability of polyelectrolyte-fluorinated surfactant complexes for antifouling and soil resistant coatings)

IT Polyoxyalkylenes, properties

- Polyoxyalkylenes, properties
 RL: PRP (Properties)
 (fluorine-contg.; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT Polyoxyalkylenes, properties
 RL: PRP (Properties)
 (perfluoro; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT Polymer morphology
 (phase; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT Fluoropolymers, properties
 Fluoropolymers, properties
 Fluoropolymers, properties
 RL: PRP (Properties)
 (polyoxyalkylene-; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT Contact angle
 Polyelectrolytes
 (structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT Fluoropolymers, properties
 RL: PRP (Properties)
 (structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT 67479-86-1D, Zonyl FSP, complexes with poly(diallyldimethylammonium chloride)
 RL: PRP (Properties)
 (PEG ammonium phosphate perfluoroalkyl ethers; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT 83653-37-6D, Zonyl FSE, complexes with poly(diallyldimethylammonium chloride)
 RL: PRP (Properties)
 (ammonium salts of PEG ether phosphates; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT 57534-43-7D, Zonyl FSA, complexes with poly(diallyldimethylammonium chloride)
 RL: PRP (Properties)
 (perfluoroalkylethylthiopropionates; structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)
- IT 26062-79-3D, Poly(diallyldimethylammonium chloride), complexes with fluorinated anionic surfactants 54950-05-9D, Fluowet SB, complexes with poly(diallyldimethylammonium chloride)
 RL: PRP (Properties)
 (structure and stability of polyelectrolyte-fluorinated surfactant complexes for **antifouling** and **soil** resistant coatings)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L35 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:197587 HCAPLUS
 DOCUMENT NUMBER: 128:218623
 TITLE: Concentrated quaternary ammonium fabric softener
 compositions containing cationic polymers
 INVENTOR(S): Cooper, Megan A.; Trinh, Toan; Wahl, Errol
 Hoffman; Ward, Richard Martin
 PATENT ASSIGNEE(S): Procter & Gamble Company, USA; Cooper, Megan A.;
 Trinh, Toan; Wahl, Errol Hoffman; Ward, Richard
 Martin
 SOURCE: PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9812293	A1	19980326	WO 1997-US16690	199709 19
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2265769	AA	19980326	CA 1997-2265769	199709 19
AU 9743563	A1	19980414	AU 1997-43563	199709 19
EP 931132	A1	19990728	EP 1997-941709	199709 19
EP 931132	B1	20031105		199709 19
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1237199	A	19991201	CN 1997-199584	199709 19
CN 1238000	A	19991208	CN 1997-199836	199709 19
JP 2000503735	T2	20000328	JP 1998-514913	199709 19
BR 9713213	A	20000404	BR 1997-13213	199709 19
AT 253626	E	20031115	AT 1997-941709	199709 19
NO 9901203	A	19990519	NO 1999-1203	199709 19

KR 2000036214	A	20000626	KR 1999-702276	199903 11
US 6492322	B1	20021210	US 1999-269086	199903 17
US 2003104964	A1	20030605	US 2002-307634	199903 18
US 6797688	B2	20040928		200212 02
US 2004235707	A1	20041125	US 2004-873913	
US 6939844	B2	20050906		200406 22
US 2005130872	A1	20050616	US 2005-34478	
PRIORITY APPLN. INFO.:			US 1996-26442P	P 200501 13
			WO 1997-US16690	W 199609 19
			US 1999-269086	A1 199709 19
			US 2002-307634	A1 199903 18
			US 2004-873913	A1 200212 02
				200406 22

OTHER SOURCE(S): MARPAT 128:218623

AB Aq. stable, preferably concd., aq. liq. textile softening compns. comprise fabric softener active and 0.001-10% cationic polymer in the continuous aq. phase, where diester quaternary ammonium compds. of fatty acyl groups have an I value 5-140. The cationic polymers provide addnl. benefits such as dye transfer inhibition, Cl scavenging to protect fabrics, cotton soil release benefits, etc. Thus, a fabric softener contained diester (83%) 28.2, HCl 1.50, silicone antifoam 0.25, CaCl₂ 8.00, soil release polymer 1.25, diethylenetriaminepentaacetic acid soln. 9.00, perfume 1.28, ammonium chloride (25%) 0.40, Cypro 514 cationic polymer 0.4, colorant 0.68 parts, and the balance water.

IT 26062-79-3, Magnifloc 587C

RL: MOA (Modifier or additive use); USES (Uses)

(concd. quaternary ammonium fabric softener compns. contg. cationic polymers for storage stability, softness, static guard, dye and bleach protection)

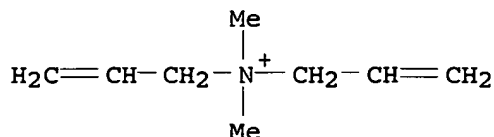
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IC ICM C11D003-00

ICS C11D003-37; C11D001-62; C11D017-00

CC 46-5 (Surface Active Agents and Detergents)

IT 26062-79-3, Magnifloc 587C 39660-17-8, Cypro 514
116770-99-1, Aziridine-ethylene oxide graft copolymer 143477-53-6,
Tinofix Eco

RL: MOA (Modifier or additive use); USES (Uses)

(concd. quaternary ammonium fabric softener compns. contg.

cationic polymers for storage stability, softness, static guard,
dye and bleach protection)REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L35 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:789160 HCAPLUS

DOCUMENT NUMBER: 123:170591

TITLE: Polymers of alkenesulfonic acids and
vinylphosphonic acid or derivativesINVENTOR(S): Hoffmann, Herrmann; Buch, Wolfgang; Gulden,
Walter; Engelhardt, Fritz; Funk, Ruediger H.;
Tardy, Aranka

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 643081	A1	19950315	EP 1994-113443	199408 29
R: DE, DK, GB, NL DE 4330699	A1	19950316	DE 1993-4330699	199309 10
NO 9403335	A	19950313	NO 1994-3335	199409 09

JP 07173226

A2

19950711

JP 1994-216391

199409

09

PRIORITY APPLN. INFO.:

DE 1993-4330699

A

199309

10

AB Polymers useful in saline waters as alk. earth sulfate and CaCO₃ deposition inhibitors contain 50-99.5% alkenesulfonic acids CH₂:C(R₁)ZSO₃R₂ [R₁ = H, Ph, alkyl; R₂ = H, alkyl, NH₄, alkali metal or alk. earth ion; Z = (CH₂)_n (n = 0-4)] and 50-0.5% phosphonic acid deriv. CH₂:CHPO(OR₁)(OR₂) (R₁, R₂ = H, alkyl, NH₄, alkali metal or alk. earth ion). Persulfate-initiated polymn. of 90 g ethenesulfonic acid and 10 g vinylphosphonic acid in 120 g H₂O at 60° gave a clear, slightly viscous soln. of copolymer (I) with wt.-av. mol. wt. 10,000. The min. concn. of I required to inhibit mineral deposit formation (BaSO₄, tube plugging test) was 15 mg/L.

IT 167682-80-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of, for use in water treatment)

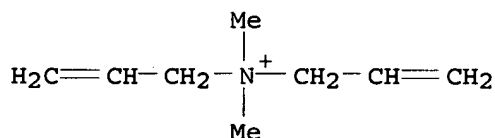
RN 167682-80-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with ethenesulfonic acid and ethenylphosphonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

CM 2

CRN 1746-03-8

CMF C2 H5 O3 P



CM 3

CRN 1184-84-5

CMF C2 H4 O3 S



IC ICM C08F228-02
 ICS C08F230-02; E21B043-27; C14C003-22; D06P001-52
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 61
 IT **Detergents**
 (builders; polymers of alkenesulfonic acids and vinylphosphonic acid as)
 IT 110161-68-7P 167682-70-4P 167682-71-5P 167682-72-6P
 167682-73-7P 167682-74-8P 167682-75-9P 167682-76-0P
 167682-77-1P 167682-78-2P 167682-79-3P **167682-80-6P**
 167682-81-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (prepn. of, for use in water treatment)

L35 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1986:226750 HCAPLUS
 DOCUMENT NUMBER: 104:226750
 TITLE: **Detergent** and softening agent compositions
 INVENTOR(S): Somers, Andreas Jan; Bonnechere, Genevieve; Laitem, Leopold
 PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA
 SOURCE: Ger. Offen., 55 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 3531756	A1	19860313	DE 1985-3531756	198509 03
ZA 8506442	A	19870429	ZA 1985-6442	198508 23
SE 8504060	A	19860305	SE 1985-4060	198509 02
GB 2164657	A1	19860326	GB 1985-21762	198509 02
GB 2164657	B2	19881214		
FI 8503383	A	19860305	FI 1985-3383	198509 03
FI 82261	B	19901031		
FI 82261	C	19910211		
NO 8503467	A	19860305	NO 1985-3467	198509 03
NO 165685	B	19901210		
NO 165685	C	19910320		

AU 8546997	A1	19860313	AU 1985-46997	198509 03
AU 586981	B2	19890803		
ES 546689	A1	19880216	ES 1985-546689	198509 03
BE 903176	A1	19860304	BE 1985-215539	198509 04
DK 8504038	A	19860305	DK 1985-4038	198509 04
FR 2569716	A1	19860307	FR 1985-13134	198509 04
FR 2569716	B1	19881110		
NL 8502423	A	19860401	NL 1985-2423	198509 04
JP 61083296	A2	19860426	JP 1985-195696	198509 04
CH 670650	A	19890630	CH 1985-3800	198509 04
AT 8502581	A	19921015	AT 1985-2581	198509 04
AT 396111	B	19930625		
PRIORITY APPLN. INFO.:			US 1984-647079	A 198409 04

AB Compns. for the simultaneous washing and softening of textiles in water at $\geq 60^\circ$ contain a nonionic surfactant 1-20, a quaternary ammonium compd. (softener) 2-20, and an amphoteric surfactant $\leq 10\%$ as well as 0.5-10% of a compd. which increases the substantivity of the softener to the textiles, i.e., a bisquaternary ammonium compd., a polymer of diallyldimethylammonium chloride, cationic guar gum, maleic acid-Me vinyl ether copolymer, or a diimidazolinium compd. The nonionic surfactant alone or with the amphoteric surfactant gives a compn. which upon addn. in 1% concn. to wash water has a turbidity point above the temp. of the wash water. The **detergent**-softener compns. give good **soil** removal during laundering. Thus, a **detergent**-softener compn. contained ethoxylated (20 mols) nonylphenol 15.0, Na5P3O10 42.0, dimethyldistearylammonium chloride (I) 6.45, Adogen 477 3.0, and other components 33.55%. This compn. was used (100 g in .apprx.20 L water) at 60° for the laundering-softening of fabrics, giving softness similar to that obtained by adding I to the fabrics in the rinsing stage following washing.

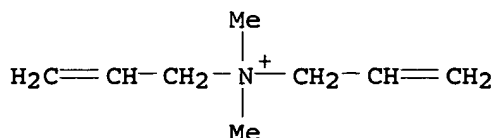
IT 26590-05-6
RL: USES (Uses)
(for softening agent substantivity to textiles during laundering)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

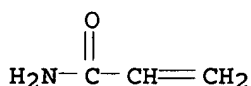
CRN 7398-69-8
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 79-06-1
CMF C3 H5 N O



IC ICM C11D001-86
ICS C11D001-62; C11D003-37; C11D003-28; D06M013-34; D06M013-46
CC 46-5 (Surface Active Agents and Detergents)
ST softener fabric **detergent** laundry; quaternary ammonium
softener **detergent**; ammonium fabric softener
detergent; ethoxylate **detergent** fabric softener;
nonionic **detergent** fabric softener
IT Softening agents
(quaternary ammonium compds., laundry **detergents**
contg., for high temp.)
IT Alcohols, compounds
RL: USES (Uses)
(C12-15, ethoxylated, laundry **detergents** contg. fabric
softeners and, for high temp.)
IT **Detergents**
(laundry, contg. nonionic surfactant and fabric softener, for
high temp.)
IT 109-76-2D, quaternary derivs. 9000-30-0D, cationic derivs.
25153-40-6 26590-05-6
RL: USES (Uses)
(for softening agent substantivity to textiles during laundering)
IT 9016-45-9
RL: USES (Uses)
(laundry **detergents** contg. fabric softeners and, for
high temp.)
IT 107-64-2
RL: USES (Uses)
(softeners, for textiles, laundry **detergents** contg.
nonionic surfactants and)

L35 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:573481 HCAPLUS

MEI HUANG EIC1700 REM4B28 571-272-3952

07/17/2006

DOCUMENT NUMBER: 101:173481
 TITLE: Zwitterionic polymers having clay soil removal/antiredeposition properties useful in detergent compositions
 INVENTOR(S): Gosselink, Eugene P.
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA
 SOURCE: Eur. Pat. Appl., 61 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

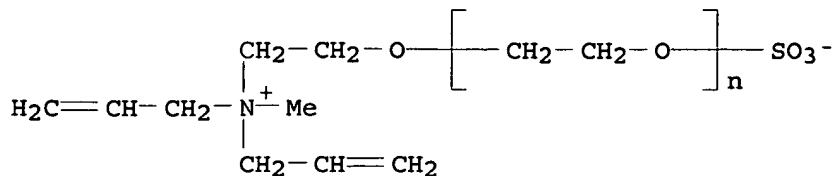
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 112592	A2	19840704	EP 1983-201775	19831214
EP 112592	A3	19870902		
EP 112592	B1	19890823		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
AT 45764	E	19890915	AT 1983-201775	19831214
CA 1215064	A1	19861209	CA 1983-444156	19831222
US 4622378	A	19861111	US 1985-701883	19850215
PRIORITY APPLN. INFO.:			US 1982-452650	A 19821223
			EP 1983-201775	A 19831214

AB The title polymers, useful in laundry **detergents**, comprise a polyurethane (I) [92489-12-8] prepd. from (HOCH₂CH₂)₂N+Me(CH₂CH₂O)_nSO₃⁻ (av. n = 26) and OCN(CH₂)₆NCO, a zwitterionic copolymer prepd. from H₂C:CHCO₂(CH₂CH₂O)_n(CH₂)₃SO₃H and H₂C:CMcCONH(CH₂)₃NMe₂, a polyethylenimine with repeating units CH₂CH₂N+[(CH₂CH₂O)_nSO₃⁻], or a similar zwitterionic polymer. Thus, a granular **detergent** having good clay soil removal and antiredeposition properties comprised I 1.0, Na alkyl ether sulfate 10.7, linear C₁₃ alkylbenzenesulfonic acid 4.3, ethoxylated C₁₂₋₁₄ alkanols 0.5, Na toluenesulfonate 1.0, Na₅P₃O₁₀ 32.9, Na₂CO₃ 20.3, Na silicate 5.8, and water-additives 23.5%.

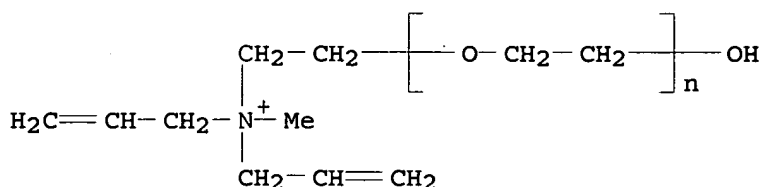
IT 92489-09-3
 RL: TEM (Technical or engineered material use); USES (Uses)
 (laundry **detergents** contg., for clay soil removal and antiredeposition properties)
 RN 92489-09-3 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[2-(methyldi-2-propenylammonio)ethoxy]-, inner salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

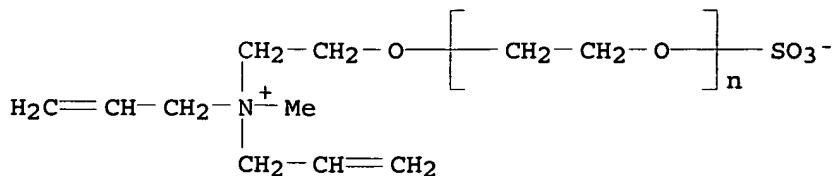
CRN 92488-84-1
 CMF (C2 H4 O)_n C9 H17 N O4 S
 CCI PMS



IT 92417-24-8P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. and conversion to zwitterionic form)
 RN 92417-24-8 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -[2-(methyldi-2-propenylammonio)ethyl]- ω -hydroxy-, bromide (9CI) (CA INDEX NAME)



IT 92488-84-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and polymn. of)
 RN 92488-84-1 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -sulfo- ω -[2-(methyldi-2-propenylammonio)ethoxy]-, inner salt (9CI) (CA INDEX NAME)



IC C11D003-37
 CC 46-5 (Surface Active Agents and Detergents)
 ST polymer zwitterion **detergent** laundry; ampholyte polymer **detergent** laundry; polyurethane zwitterion **detergent** laundry; polyethylenimine zwitterion **detergent** laundry; ethoxylate zwitterion **detergent** laundry; **soil** antiredeposition **detergent**

IT Amphoteric substances
 Zwitterionic compounds
 RL: USES (Uses)
 (polymers, laundry **detergents** contg., for clay
soil removal and antiredeposition properties)

IT Urethane polymers, uses and miscellaneous
 RL: USES (Uses)
 (zwitterionic, laundry **detergents** contg., for clay
soil removal and antiredeposition properties)

IT **Detergents**
 (laundry, contg. zwitterionic polymers with clay **soil**
 removal and antiredeposition properties)

IT 9002-98-6D, sulfoethoxylated 92488-82-9 **92489-09-3**
 92489-11-7D, quaternized 92489-12-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (laundry **detergents** contg., for clay **soil**
 removal and antiredeposition properties)

IT **92417-24-8P** 92488-22-7P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. and conversion to zwitterionic form)

IT **92488-84-1P**
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP
 (Preparation); RACT (Reactant or reagent)
 (prepn. and polymn. of)

IT 75-21-8D, reaction products with polyethylenimine 25322-68-3D,
 amine derivs.
 RL: USES (Uses)
 (zwitterionic, laundry **detergents** contg., for clay
soil removal and antiredeposition properties)

L35 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN.

ACCESSION NUMBER: 1984:573477 HCAPLUS

DOCUMENT NUMBER: 101:173477

TITLE: **Detergent** compositions containing
 cationic compounds having clay **soil**
 removal/anti-redeposition properties

INVENTOR(S): Oh, Young Sik; Rubingh, Don Nelton; Gosselink,
 Eugene Paul

PATENT ASSIGNEE(S): Procter and Gamble Co., USA

SOURCE: Eur. Pat. Appl., 69 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 111965	A2	19840627	EP 1983-201751	198312 13
EP 111965	A3	19870909		
EP 111965	B1	19890726		
R: AT, BE, CH, DE, FR, IT, LI, NL, SE				
US 4551506	A	19851105	US 1982-452655	198212 23
US 4659802	A	19870421	US 1983-553551	198311

US 4664848	A	19870512	US 1983-553550	22
				198311
				22
AT 44978	E	19890815	AT 1983-201751	198312
				13
CA 1211446	A1	19860916	CA 1983-444159	198312
				22
CA 1213275	A1	19861028	CA 1983-444169	198312
				22
PRIORITY APPLN. INFO.:			US 1982-452648	A
				198212
				23
			US 1982-452649	A
				198212
				23
			US 1982-452655	A
				198212
				23
			US 1983-553550	A
				198311
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			US 1983-553551	A
				198311
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			EP 1983-201751	A
				198312
				13

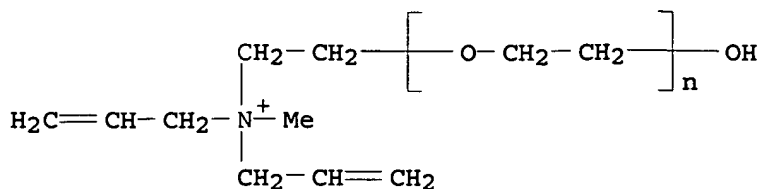
AB The title compd., useful in laundry **detergents**, comprised ethoxylated quaternized amines derived from dimorpholinoalkanes, diaminoalkanes, trialkanolamines, dialkanolamine-diisocyanatoalkane copolymers, N-[3-(dimethylamino)propyl]methacrylamide (I) copolymers, polyalkylenepolyamines, dialkenylamine polymers, etc. Thus, a copolymer was prepd. from 0.008 mol decaethylene glycol monomethacrylate and 0.011 mol I and quaternized with MeBr to prep. a product which was used (1 part) in a liq. **detergent** compn. contg. Na alkyl ether sulfate 8.3, alkyldimethylamine oxide 3.3, Na toluenesulfonate 5.0, ethanolamine 2.3, N(CH₂CO₂Na)₃ 18.2, and water/additives 61.9 parts.

IT 92417-24-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 92417-24-8 HCAPLUS

CN Poly(oxy-1,2-ethanediy1), α -[2-(methyldi-2-propenylammonio)ethyl]- ω -hydroxy-, bromide (9CI) (CA INDEX NAME)



● Br⁻

IC C11D001-40
 CC 46-5 (Surface Active Agents and Detergents)
 ST ethoxylate amine quaternary additive **detergent**; laundry
detergent soil antiredeposition; polyamine
 ethoxylate quaternary **detergent**; polyurethane ethoxylate
 quaternary **detergent**; aminoalkyl methacrylate polymer
detergent; ammonium quaternary antiredeposition **soil**
 IT Urethane polymers, uses and miscellaneous
 RL: USES (Uses)
 (ethoxylated, quaternized, **soil** antiredeposition
 agents, for laundry **detergents**)
 IT Quaternary ammonium compounds, uses and miscellaneous
 RL: USES (Uses)
 (ethoxylated, **soil** antiredeposition agents, for laundry
detergents)
 IT **Detergents**
 (laundry, **soil** antiredeposition agents for, ethoxylated
 quaternized amines as)
 IT 92093-04-4P 92417-24-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 IT 74-83-9DP, quaternization products with amines 27014-42-2DP,
 quaternization products with halohydrocarbons 39968-51-9DP,
 quaternization products with halohydrocarbons 40032-04-0DP,
 quaternization products with halohydrocarbons 92068-37-6DP,
 quaternization products with Me bromide 92417-27-1P 92417-28-2P
 92488-21-6P 92488-22-7P 92509-60-9DP, quaternization products
 with halohydrocarbons
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of, as **soil** antiredeposition agent in
detergents)

L35 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1983:614500 HCAPLUS
 DOCUMENT NUMBER: 99:214500
 TITLE: Cleaner for unfinished leather
 INVENTOR(S): Arnhold, Siegfried; Gergele, Heidrun; Jacobasch,
 Hans Joerg; Thiel, Barbara; Grosse, Ingrid
 PATENT ASSIGNEE(S): VEB Chemiekombinat Bitterfeld, Ger. Dem. Rep.
 SOURCE: Ger. (East), 11 pp.
 CODEN: GEXXA8
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

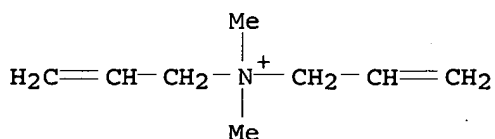
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 201458	Z	19830720	DD 1981-233026	198109 04
PRIORITY APPLN. INFO.:			DD 1981-233026	198109 04

AB A cleaning compn. for removing dirt from unfinished leather comprises a silicic acid dispersion, a polymeric cationic active compd., and an emulsifier-dispersant system. Thus, a flexible foam sponge was moistened with H₂O, pressed out well, and a cleaning compn. comprising a silicic acid dispersion 1.00, poly(dimethyldiallylammonium chloride) [26062-79-3] 0.04, a lower ethoxylated alkylphenol 0.01, and alkylphenol glycol ether 0.20, and H₂O 98.75% was poured on. The soiled spots were softly rubbed, and the soiled sponge was thoroughly rinsed with running water and pressed out. The cleaning agent was poured on the sponge, and the treatment was repeated until the sponge took up no more dirt.

IT 26062-79-3
RL: USES (Uses)
(cleaning compns. from silicic acid and, for unfinished leather)
RN 26062-79-3 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8
CMF C8 H16 N . Cl



● Cl⁻

IC C11D010-02
CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 46
IT **Detergents**
(from silicic acid and polymeric cationic active compds., for unfinished leather)
IT 26062-79-3
RL: USES (Uses)
(cleaning compns. from silicic acid and, for unfinished leather)

L35 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1979:8029 HCAPLUS
DOCUMENT NUMBER: 90:8029
TITLE: **Detergent**

INVENTOR(S): Herpers, Ferdinand Joseph, Jr.; Untiedt, Daniel
 Irvil
 PATENT ASSIGNEE(S): Tennant Co., USA
 SOURCE: Ger. Offen., 15 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2717849	A1	19781026	DE 1977-2717849	197704 22
DE 2717849	B2	19790920		
DE 2717849	C3	19800604		
PRIORITY APPLN. INFO.:			DE 1977-2717849	A 197704 22

AB Acrylamide-diallyldimethylammonium chloride copolymer [26590-05-6] with mol. wt. >1,000,000 is used (1.5-20.0%) with alk. builders, wetting agents, etc., to prep. **detergents** for use in app. for cleaning floors. Cleaning solns. contg. the **detergents** are filtered to remove **soil**, and the solns. are reused. The copolymer (flocculant) improves the filtration of the solns.

IT 26590-05-6
 RL: USES (Uses)
 (flocculating agents, cleaning solns. contg., for removal of dirt by filtration)

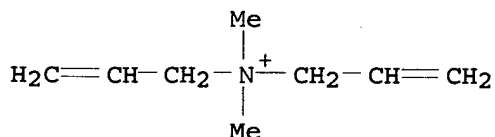
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

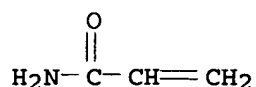
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 79-06-1
 CMF C3 H5 N O



IC C11D003-37
 CC 46-6 (Surface Active Agents and Detergents)
 ST floor cleaning soln filtration; cleaning soln filtration flocculant;
 acrylamide copolymer filtration **detergent**; allylammonium
 copolymer filtration **detergent**
 IT **Detergents**
 (cleaning solns., contg. flocculants, for improved removal of
 dirt by filtration)
 IT **26590-05-6**
 RL: USES (Uses)
 (flocculating agents, cleaning solns. contg., for removal of dirt
 by filtration)

L35 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:569572 HCAPLUS
 DOCUMENT NUMBER: 87:169572
 TITLE: **Detergent** composition
 INVENTOR(S): Herpers, Ferdinand J., Jr.; Untiedt, Daniel I.
 PATENT ASSIGNEE(S): Tennant Co., USA
 SOURCE: U.S., 10 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 4014808	A	19770329	US 1975-610264	197509 04
SE 7407206	A	19741205	SE 1974-7206	197405 30
FR 2231747	A1	19741227	FR 1974-19122	197405 31
AU 7469709	A1	19751204	AU 1974-69709	197406 03
IT 1013346	A	19770330	IT 1974-51353	197406 03
CA 1009920	A1	19770510	CA 1974-201449	197406 03
JP 50022813	A2	19750311	JP 1974-63275	197406 04
GB 1469124	A	19770330	GB 1974-24697	197406 04
PRIORITY APPLN. INFO.:			US 1973-366441	A2

197306
04

AB Detergent compns. are prepd. which contain a flocculant and are esp. useful for the removal of soil from floors and other surfaces. The flocculant is a polymer of diallyldimethylammonium chloride (I) and/or acrylamide, guar gum [9000-30-0], or a cationic polyamine. Thus, a detergent conc. contained Na₅P₃O₁₀ 7, KOH 5.3, soda ash 2.2, Triton BG-10 1.5, I polymer [26062-79-3] (mol. wt. 100,000, 40% soln.) 14, and water 70%. The dirt-holding capacity of this cleaning soln. was >35 times the wt. of the polyelectrolyte present.

IT 26062-79-3 26590-05-6

RL: USES (Uses)

(flocculants, cleaning compns. contg., for floors)

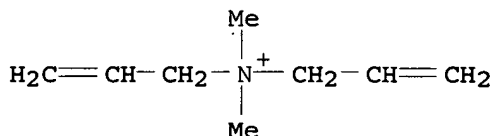
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl



● Cl⁻

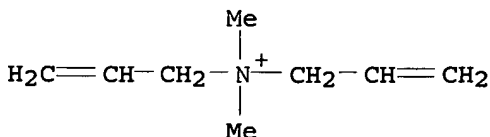
RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

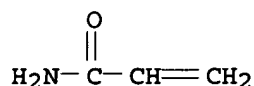
CMF C8 H16 N . Cl



● Cl⁻

CM 2

CRN 79-06-1
CMF C3 H5 N O



IC C11D003-066
INCL 252135000
CC 46-6 (Surface Active Agents and Detergents)
ST **detergent** flocculant floor cleaner;
polydiallyldimethylammonium chloride floor cleaner; polyacrylamide
floor cleaner; guar gum floor cleaner; quaternary ammonium polymer
cleaner; polyelectrolyte soln floor cleaner
IT **Detergents**
(cleaning compns., contg. flocculating agents, for hard surfaces)
IT 9000-30-0 9003-05-8 26062-79-3 26590-05-6
39429-71-5
RL: USES (Uses)
(flocculants, cleaning compns. contg., for floors)

L35 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:158158 HCAPLUS
DOCUMENT NUMBER: 82:158158
TITLE: **Detergent** composition
INVENTOR(S): Herpers, Ferdinand J., Jr.; Untiedt, Daniel I.
PATENT ASSIGNEE(S): Tennant Co.
SOURCE: Ger. Offen., 29 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 2426691	A1	19741219	DE 1974-2426691	197406 01
DE 2426691 SE 7407206	C3 A	19781214 19741205	SE 1974-7206	197405 30
FR 2231747	A1	19741227	FR 1974-19122	197405 31
AU 7469709	A1	19751204	AU 1974-69709	197406 03
IT 1013346	A	19770330	IT 1974-51353	197406 03
CA 1009920	A1	19770510	CA 1974-201449	197406 03
JP 50022813	A2	19750311	JP 1974-63275	197406

GB 1469124

A

19770330

GB 1974-24697

04

197406

04

PRIORITY APPLN. INFO.:

US 1973-366441

A

197306

04

AB Cleaning solns., esp. useful for cleaning floors, contained water, alkaline builders, wetting agents, and flocculating agents, such as poly(diallyldimethylammonium chloride) (I) [26062-79-3] or polyacrylamide [9003-05-8], which caused agglomeration of soil particles in the used cleaning solns. and permitted reuse of the solns. after filtration. Thus, a concd. cleaning soln. comprised Na tripolyphosphate 7, KOH 5.3, soda 2.2, Triton BG-10 (nonionic surfactant) 1.5, I (mol. wt. 100,000) 1.4, and water 70%.

IT 26062-79-3

RL: USES (Uses)

(flocculants, for soil agglomeration and removal from detergent solns.)

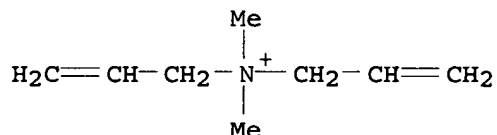
RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl⁻

IC C11D

CC 46-6 (Surface Active Agents and Detergents)

ST floor cleaning soln reuse; filtration cleaning soln flocculation; polyallylmethylammonium flocculation cleaning soln; polyacrylamide flocculation cleaning soln; detergent soln flocculation filtration

IT Flocculating agents

(detergent solns. contg., for soil filtration from)

IT Detergents

(floor cleaning solns., soil filtration from)

IT Filtration

(of detergents solns., soil removal by, flocculating agents for)

IT 9000-30-0 9003-05-8 26062-79-3 39429-71-5

RL: USES (Uses)

(flocculants, for soil agglomeration and removal from detergent solns.)